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ABSTRACT

This study was conducted to delineate some of the characteristics of disabled clients which contribute significantly to success in vocational programs. The performance of disabled persons in three types of vocational settings (college, skill training, and work evaluation/work experience samples) was examined to determine if the factors contributing to objective measures of success varied as a function of the program demands or the clinet/student's initial abilities. An additional part of the project was devoted to a follow-up of clients who had been placed in employment in order to gauge their long-term stability and factors which potentially relate to their maintenance of employment. The 82 subjects were interviewed and observed in their programs and assessments were made of their: (1) work assets, (2) goals, (3) disability, (4) degree of interpersonal support from family and friends, (5) attitude toward disability, (6) interpersonal dominance, (7) locus of control, (8) ability to manage others, and (9) performance in the vocational setting. The over-all results were interpreted to mean that success for disabled persons is determined by different factors over the long process of vocational readiness. Criteria of success early in training are advancement to better training, and this requires job skills and a positive attitude toward work. However, later success requires the additional factor of emotional stability. (SB)

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THE INFLUENCE OF PSYCHOSOCIAL FACTORS ON THE SUCCESS OF DISABLED PERSONS IN DIFFERENT VOCATIONAL EDUCATION SETTINGS

Final Report

by

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California State Department of Education
Vocational Education Section
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Attending Staff Association of
Rancho Los Amigos Hospital, Inc.

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to
California State Department of Education
Vocational Education Section

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The Influence of Psychosocial Factors on the Success of Disabled Persons in Different Vocational Education Settings

PURPOSE AND BACKGROUND

PHASE I

Interest in assessing worker characteristics in relation to the demand characteristics of rehabilitation work settings has increased (see Neff, 1971 for detailed references, particularly by Lofquist). Only limited information is available at this time on the factors governing individual differences in work behavior among disabled persons. The present study focused on psychosocial characteristics and work asset factors as they relate to measures of improvement in several different vocational education programs for handicapped persons. Three programs were examined to determine the interaction between the demands of the particular vocational education setting and the characteristics of the person which are important for success. Sound understanding of factors leading to success in these programs requires knowledge of both the person and the environment. This is especially true for disabled and otherwise disadvantaged persons who have special needs and problems necessitating special efforts in placement and vocational education.

This total project's aims were to delineate some of the characteristics of disabled clients which contribute importantly to their success in vocational education. Programs for disabled persons vary

considerably, since there is a wide variety in disabled persons' abilities, problems, and goals. The factors which serve as objective indices of success in one type of vocational program may not do so in another program and setting.

For these reasons, three different vocational education programs, each with their distinct goals and programs, were examined. This part of the study constituted Phase I of the project. In this phase, selected psychosocial factors were correlated with the degree of benefit derived from the various programs as measured by improvement on performance ratings, grades, advancement to further training, placement, or employment.

A second aspect of these programs to consider is the long-term objective of providing a person with skills and abilities which result in the maintenance of employment. Phase II of the project therefore aimed to explore the long-term effectiveness of a unique multifaceted program of vocational education and training on the client's employment status and life situation a year after placement.

Several of the independent variables examined in the three programs were derived from previous studies. Three of these factors were psychometric measures of the clients' interpersonal orientations. The Mach IV Scale (Christie and Geis, 1970) reflects the degree to

which the client believes in the effectiveness of a particular way of dealing with people (the Machiavellian orientation). This orientation involves a utilitarian approach to interpersonal interactions. It was expected that this trait might be beneficial, in moderate degrees, for the success of a disabled group. It was hypothesized that the "manipulative" client might have an adaptive capacity and commonly employed efforts to discourage it might actually be counter-productive. The disabled person who "manages" other people appropriately in compensation for his own reduced physical ability may have a valuable resource at his disposal, especially in occupations where interpersonal functioning plays a large role. Rotter's (1966) Locus of Control factor also was included. It measures the degree to which the individual believes that his own efforts and abilities, rather than external factors, influence his successes or failures in obtaining goals and rewards. Following the rationale that an individual's sense of personal control influences his interests and knowledge regarding his own affairs as well as his performance (cf., Seeman and Evans, 1962), it was hypothesized that the greater the client's belief that he has control over his rewards and future (internal control), the greater would be his achievements. Tseng (1970) found that individuals receiving vocational education who believed in internal control were more interested

in their treatment and were more punctual to work than those who believed in external control. Seeman (1963) found similar results in a group of prison inmates. Inmates who believed in internal control sought more information about the requirements for parole than did those who believed in external control. Presumably, people do not attempt to achieve if they feel that success is out of their control. Commonly abused phrases such as "He shows a lack of motivation" may reflect a lack of belief that effort will actually make a difference.

Kemp and Vash (1971) found three additional interpersonal factors which were related to successful adjustment to a disability when degree of "productivity" was considered as the criterion. Interpersonal dominance, the degree to which the individual exhibits self-confidence and assertion in his social relations, was positively related to the degree of productivity attained by spinal cord injured persons several years after their disabilities. The two additional factors were ratings of interpersonal support (i.e., the degree to which the person was provided with psychological support, interest, and encouragement as well as practical and financial help from his family and friends) and the number of personal goals the individual reported. The more goals the person reported, the higher were his ratings of productivity. Moreover, a positive correlation was

obtained between the degree of interpersonal support and the number of goals reported, suggesting that interpersonal support plays a role in coping with the emotional aspects of disability and/or helping the disabled person to establish new values. Therefore, these variables were also included in the current study.

An additional set of variables was derived from a demonstration project by Vash and Murray (1969) who studied factors related to the eventual employment status of rehabilitation clients after vocational services were provided. Paramount among these were a set of "work assets" including (1) the intellectual resources of the individual (Brain), (2) the physical strength of the individual (Brawn), and (3) the individual's ability to use his hands adequately (Hand Dexterity). Emotional stability also played an important role. Persons who were employed after the project had a work asset profile which consisted of at least two medium ratings (when ratings were made on a three-point scale), or one high rating on the first three factors. In addition, each person had to have at least a medium rating on emotional stability to be employed. One without the other was not sufficient. Kemp (1972) sampled rehabilitation clients a year after closure from service and found that Brain, Brawn, and Emotional Stability were correlated with long-term vocational success. In addition, he found Social Personality (the ability to influence

the behavior and attitudes of others) to be another work asset related to success. These four work assets plus Emotional Stability were included in the study.

Finally, attitudes disabled persons have toward their disabilities were also examined, as attitudes likely affect how well disabled individuals relate to others and adjust to their own conditions. Yuker, Block, and Young (1966) have developed scales to measure Attitudes Toward Disabled Persons (ATDP). They have shown that the disabled person's attitudes toward himself can be measured by asking him to describe his attitudes toward people with disabilities as a general group. Unfavorableness of attitude is measured by the degree to which the respondent believes that persons with disabilities differ from and are inferior to persons without disabilities. Disabled persons with more positive attitudes have been found to have higher ratings of employability, fewer absences from work, and a higher quality of production in a workshop setting. In the current study this scale was administered to the disabled person and the person named as closest to the client in order to determine whether the attitudes of these "significant others" are also related to the client's performance and success.

Since the rehabilitation counselor plays a critical role in influencing the client, either directly or indirectly through the program

suggestions he makes, counselors' expectations for the workshop clients were obtained to determine the counselors' accuracy in predicting their success and performance.

Seven hypotheses involving the variables outlined above were derived for investigation in the three samples. These were:

1. Individuals scoring higher on the Mach IV scale will score higher on measures of success (Christie, 1970; Kemp and Vash, 1971).
2. Persons scoring lower on the Locus of Control scale (greater internal control) will demonstrate significantly higher ratings on the criterion measures of success (Tseng, 1970; Seeman, 1963).
3. Individuals scoring higher on the Dominance sub-scale of the California Psychological Inventory will have higher ratings of success than those scoring lower on the scale (Kemp and Vash, 1971).
4. Persons scoring higher on the Attitudes Toward Disabled Persons scale (Yuker, Block and Young, 1966) will score higher on criterion measures of success. In addition, those clients whose "significant others" (i.e., persons named as closest to them) have positive attitudes toward the disabled will score higher on the success measures.
5. Clients having higher levels of interpersonal support will attain higher ratings of success (Kemp and Vash, 1971).

6. Individuals reporting more goals will achieve higher ratings on the criterion measures of success as compared to individuals with fewer goals (Kemp and Vash, 1971).
7. Clients having higher ratings on job assets will have higher performance ratings (except in the college sample).

An additional hypothesis was derived from the expected nature of the interaction between the characteristics of the client and the characteristics of the environment:

8. The closer the training or education situation approaches a setting where competition with the normal population is important, the more essential social personality, emotional stability, and attitudinal variables will be.

This hypothesis follows from a study by Kemp (1972), who found that social personality and emotional stability predicted long-term criteria of vocational success better than other factors under the above-stated conditions. It also follows from the nature of the work on attitudes toward disability reported by Yuker and others. They found that disabled persons with more positive attitudes (belief that disabled individuals are competitive with and equal to normals) performed well in work settings. It appears that the closer one gets to a setting where competition with normals occurs, the more important this factor becomes.

PHASE II

An additional interest in work rehabilitation is the client's adjustment after the program--the long-term effectiveness of the program in terms of the client's maintenance of employment after receiving vocational training or education. The placement of a client in employment does not end the rehabilitation process; often it begins it. The client must then adjust to the social world of work and the community. The dearth of long-term research on the client after employment was the impetus for the second phase of the present investigation. The concern was with the client after a year in the community; whether clients aided in securing jobs were still employed a year later, and whether they were satisfied with their present life situations. A specific attempt was made to assess the effectiveness of a unique multifaceted program at Rancho Los Amigos Hospital in achieving this goal versus the more typical segmented approach when the effects of the disability type were held constant.

METHOD

STUDY SETTINGS

PHASE I

Samples of disabled persons were obtained from three different and distinct vocational education settings: (1) a college sample, (2) a work training sample, and (3) a work preparation sample. The college sample was obtained from several colleges and universities in the Southern California area. The students were selected by contacting heads of special handicapped programs at the schools and asking them if students could be recruited through them. Students volunteered for the research after the heads of these programs or the investigators explained its nature. The students were enrolled in courses of various kinds, all typical of college curricula. Disabled persons usually are encouraged to attend college if they are average or above average in intelligence and if they seem to have interests in college-type subjects. Frequently, the more severely disabled persons are encouraged to attend college, because if they succeed there, their chances of a stable and profitable employment future are better with college-level training. The results (see later sections) bear out the fact that more severely disabled persons are encouraged to attend college.

The work training sample came from the Community Rehabilitation Industries (CRI) in Long Beach, California. The goals of CRI are to train people in the skills they need to perform on the job. Electronics assembly, machine work and other semi-skilled occupations are stressed. CRI is oriented toward eventual placement of their trainees onto jobs in industry. The major emphasis is on the production aspects of work. Hence, CRI tries to serve people who have already been evaluated (either by their counselors or by a previous evaluation period) as employable or potentially employable at the time of referral. People accepted by CRI are not expected to have serious emotional problems or serious doubts about their ability or interest in work. The methods CRI employs are on-the-job work under actual industry conditions. Evaluations are repeatedly made of the client's progress and level of ability. In essence, all "graduates" of CRI are expected to be placed in competitive industry.

The work preparation sample came from the Work Preparation Center (WPC) of Rancho Los Amigos Hospital in Downey, California. The WPC program consists of work evaluation, counseling, work experience, training of work habits and attitudes, bolstering of emotional stability, skill evaluation, some limited skill training, and some placement. It differs from the CRI program by focusing on behaviors more basic to work than actual skills, such as emotional stability and work attitudes.

Hence, the WPC program accepts clients with initially lower levels of ability and less chance for employment success than CRI. A higher number of cases closed as "unemployable in competitive labor" would be expected. The approach of the WPC is also different than CRI, focusing more on evaluation, remediation, and psychological counseling against the realistic background of work rather than training of actual job skills.

Different settings for the study were necessary in order to insure the wide variety of initial abilities desired. No one setting would have provided a sufficient sampling of abilities. In addition, different settings provided different "demand characteristics" that would possibly result in distinguishing characteristics being more essential in one setting than in another.

SUBJECTS

Phase I Subjects: College Sample

The college sample of 25 persons was obtained from four junior colleges (Cerritos, Rio Hondo, Harbor, Los Angeles City) and two universities (California State University, Los Angeles and University of California, Riverside) in the Southern California area. Although similar to the workshop samples in sex (68 percent were male), the college sample was younger, with a mean age of 23.7 years. It also had a

higher level of education (12.3 years), and a higher proportion of severe physical disabilities (40 percent were quadriplegics as compared to 2.8 percent at WPC and none at CRI).

A large proportion had never worked (48 percent), although 28 percent had worked part-time and 24 percent full-time, largely in clerical and sales occupations.

Workshop-Community Rehabilitation Industries (CRI) Trainees

Twenty-two trainees who had been placed on a training services grant during the period from October 1971 to April 1972 were also included in the sample. The mean age of the sample was 33 years. As with the WPC sample, these persons were predominantly male, with approximately 11 years of education. Forty-one percent of the sample had orthopedic disabilities (amputees and back injuries); 23 percent had internal disorders (predominantly cardiac problems); 23 percent had psychiatric disorders; and 9 percent had brain disorders. A full description is presented in Appendix IA.

Workshop-Work Preparation Center Evaluees

Thirty-five clients who entered the workshop in Rancho Los Amigos Hospital's Work Preparation Center (WPC) during the period of September 1971 through April 1972 were included in the sample. The mean age of this group was 18.5 years. They were predominantly male

(80 percent) and single (62.9 percent), with a mean of 11 years of education. Thirty-seven percent had brain disorders, 34 percent had orthopedic disabilities, 14 percent had internal disorders, 9 percent had psychiatric disorders, and 6 percent had other kinds of disabilities. Seventy-one percent had previously worked full-time although the majority had been in unskilled or semi-skilled occupations (a detailed description of the sample is presented in Appendix IA).

Phase II Subjects: Follow-up of Rancho Los Amigos Hospital

Twenty-five cases were obtained from the Department of Rehabilitation Unit files at Rancho Los Amigos Hospital who had been closed employed during the period of June 1970 to July 1971. Eighty percent were male; the mean age was 35 years; 68 percent had orthopedic disabilities and 25 percent had internal disorders (e.g., cardiac conditions). There was one psychiatric case and one obesity diagnosis. Forty percent were married. Educational levels ranged from 8 years to 14 years with a mean of 11.5 years. Originally a sample of 25 cases from other vocational programs who were matched on the basis of sex, nature of disability, and previous education was to be obtained. However, due to a change in administrative policy within the Department of Rehabilitation, the matched sample could not be contacted directly and was not obtained (see later section).

INSTRUMENTS

Mach IV Scale (Mach)

A Likert-type scale developed by Christie and Geis (1970) was modified and used in the study. The scale consists of 20 items which ask the subject the degree to which he endorses statements taken from sections in THE PRINCE, Machiavelli's major Renaissance manuscript. The items reflect a tendency to use shrewdness, power, and manipulation in achieving desired ends. One item was excluded in the present scale because it was thought it might be too disturbing to some disabled persons ("People suffering from incurable diseases should have the choice of being put painlessly to death"). Rather than the seven-point scale used by Christie and Geis, a five-point scale was used, with one point for strong disagreement with a Machiavellian orientation, and five for strong agreement. The scale is included in the Appendix section.

Locus of Control Scale (I-E)

Rotter's Locus of Control Scale (1966) consisting of 23 forced-choice items (and six filler items) which measure the subject's expectations regarding the relationship between rewards and behaviors was used. A point is given for each item indicating external control (i.e., controlled by external factors such as fate or luck). Low scores reflect the individual's belief that internal factors such as his behaviors, skills, or dispositions control rewards.

Dominance (Dom)

The Dominance sub-scale of the California Psychological Inventory (Gough, 1965) was used to measure the individual's degree of interpersonal dominance. Individuals with low scores on the scale see themselves as retiring, unassuming, and avoiding of situations producing tension and decision. Persons who score high see themselves as forceful, persistent, self-assured, and possessing of leadership potential (Gough, 1965). This scale was previously employed by Kemp and Vash (1971) and was found to have value in predicting successful adjustment after disability.

Attitudes Toward Disabled Persons (ATDP)

A 30-item ATDP scale, Form B, designed by Yuker, et al. (1966) was used to assess attitudes toward disability. Scores on this scale can range from 0 to 180. Persons who score low on this scale perceive disabled individuals as different from and inferior to normals. Persons who score high believe that the disabled are similar to and accepted as normals.

Interpersonal Support (IS)

A ten-item scale developed by the investigators was used to measure the degree of perceived interpersonal support. It was patterned after the results of an earlier study (Kemp and Vash, 1971) which

indicated that persons judged as having higher levels of IS (judged by five experienced clinicians who rated individual interview protocols) were better adjusted. Items were taken from the content of these earlier interviews and some new items were added to produce a 25-item scale. Fifteen judges then rated each item on how well it reflected the dimension of "interpersonal support (meaning encouragement, concern, interest, and help). The ten items with the highest and most reliable ratings were included in the scale. The inter-judge reliability of each of the scale items ranged from .80 to .92.

Work Assets

Ratings of Brain (intellectual resources of the person), Brawn (the physical strength and stamina of the person), and Emotional Stability (ability to respond constructively to stress) were obtained from at least two counselors or supervisors on each client in both the CRI and WPC samples. In addition, a rating of Social Personality (the ability to influence other persons' behavior and attitudes) was obtained in the WPC sample. The rating for each trait was defined such that each client was rated on a quartile system in comparison to the normal population. (The normal population is the one disabled individuals have to compete against.) A rank of 1 was assigned to persons in the lowest quartile in comparison to normals and a rank of 4 was assigned to the

highest quartile (see Vash and Murray, 1969; and Kemp, 1971 for more detailed accounts of these scales).

Counselors' Ratings of Clients

Three questions were asked of counselors regarding each workshop client at the time the client began in one of the programs. These were: (1) the client's likelihood of eventual employment; (2) the amount the client was expected to profit from his vocational education program; and (3) the highest employment status expected for the client in the future (e.g., sheltered workshop, competitive employment). The client's degree of employability and his expected benefit from the program were based on a nine-point scale, ranging from 0 for very low to 8 for very high. The counselors' expectations for level of eventual employment ranged from 0 for "most likely unemployable at any level" to 5 for "definitely able to maintain competitive employment" (see Appendix VIb).

CRITERIA MEASURES

Workshop Performance Ratings

For the workshop samples, a revised format of the ETS (Educational Training Service) form was used (see Appendix VII). Twenty-six items categorized according to three areas are included: Work

Performance Items (factors important for performance, such as following instructions, quality and quantity of production; Physical Abilities (such as walking, standing, lifting, bending); and Work Habits and Attitudes (such as motivation, cooperation, adjustment to fellow workers and supervisors). Each item was rated using a scale with scores of 0 for "not employable," 1 for "employable at a workshop level," 2 for "potentially competitively employable," 3 for "employable," and 4 for "very employable." Ratings were obtained after two weeks, six weeks, and at termination from the programs. Change scores as well as measures of the highest level of ability were obtained. Change scores were utilized to determine the degree of improvement in the workshop. Possible change scores were -4 to +4 on each section or a total of -12 to +12.

College Ratings

Instructors' ratings at the end of one semester were used, and success was evaluated according to the student's performance as well as his grades. Success was measured by class performance ratings, rating of habits and attitudes, estimates of potential for graduation, and by grade point average (see Appendix). The ratings were made on five-point scales to make the format similar to the other samples.

Post-Workshop Success

Post-workshop success was defined as promotion to advanced training, attainment of a placement readiness status, or actual employment. Non-successful clients were defined as those who dropped out of the program before successful termination or who were still in training and had not progressed since entering.

PROCEDURES

Phase I

Clients in the three samples (WPC, CRI, college) were interviewed at either workshop or college setting (or at home for some of the college students) to obtain background information as well as data on the number and types of personal goals, family structure, and educational and vocational history (see Appendix II0). In addition, each person was asked to complete and return the psychological questionnaires. Subjects were also asked to have the person to whom they felt closest (their significant other) also fill out the ATDP questionnaire and return it. Subjects were paid for their participation in the study. Supervisors in each workshop setting filled out the ETS forms after the second and sixth weeks and at termination from the program. The college instructors were asked to fill out and return the questionnaires on each of the students.

Phase II

The sample of 25 persons employed during the period of July 1970 to July 1971 from the Vocational Services or Department of Rehabilitation at Rancho Los Amigos Hospital was interviewed to obtain information on their current employment status and satisfaction, social situation and activities, and living arrangements. (A copy of the interview schedule appears in Appendix IX). Each client was also asked to fill out and return the ATDP questionnaire, for which he was paid. Approximately 74 percent of the ATDP forms were returned.

A list of names of 25 persons who became employed during the same period and had received comparable but decentralized services at other facilities was also obtained from the files of the Department of Rehabilitation. The "Rancho" and "decentralized" groups were matched on the basis of age, education, sex, and disability. Due to administrative restrictions regarding confidentiality of information which were introduced after the beginning of the project, clients' addresses and phone numbers could not be obtained directly from the Department. Instead, letters requesting client participation had to be sent to the district offices, asking counselors to forward these letters requesting participation to clients in the study. Self-addressed letters and stamped postcards which were to be returned by the client were included with the

letters (Appendix Xa). Only five clients responded, precluding analysis of this aspect of the study. Therefore, only Rancho Los Amigos Hospital follow-ups were used in the analysis of this phase.

RESULTS

The results of the study are divided into Phase I, short-term benefits derived from the vocational education programs, and Phase II, long-term effectiveness of the program at Rancho Los Amigos Hospital. Within Phase I, most of the results are presented separately, since they were different and distinct groups. The only exception is the descriptive data on the independent variables. Some theoretical comparisons between these settings are made in the Discussion section.

PHASE I

Description of the Samples on the Psychological Variables

Table I presents a description of the three samples on each of the independent variables. Two significant results are apparent from this table. First, the groups were ordered in terms of interpersonal support. The college sample reported the most support, followed by RLA and then the WPC. Secondly, the college sample scored significantly higher on the Dominance scale of the CPI. On all the other variables the groups were not significantly different. All of the scores for all

TABLE I

	College (n=25)	WPC Evaluees (n=25)	CRI Trainees (n=20)	Differences (+)
Mach				
Range	36-59	21-65	29-68	Coll & WPC NS
Mean	48.28	48.04	49.30	Coll & CRI NS
S.D.	8.67	10.71	10.17	CRI & WPC NS
Interpersonal Support				
Range	3-10	0-10	2-10	Coll & WPC=3.41**
Mean	8.16	5.71	7.70	Coll & CRI NS
S.D.	1.68	3.03	2.20	CRI & WPC=2.46*
Dominance				
Range	9-35	13-30	18-29	Coll & WPC NS
Mean	25.92	22.75	21.95	Coll & CRI=2.38*
S.D.	6.44	6.63	4.49	CRI & WPC NS
Locus of Control				
Range	6-16	2-16	2-18	Coll & WPC NS
Mean	9.40	9.13	8.75	Coll & CRI NS
S.D.	3.20	4.26	4.18	CRI & WPC NS
ATDP-Self				
Range	76-148	62-154	67-142	Coll & WPC NS
Mean	108.72	115.96	105.55	Coll & CRI NS
S.D.	22.66	27.94	22.79	CRI & WPC NS
ATDP-Other				
Range	51-143	51-152	69-132	Coll & WPC NS
Mean	104.04	108.79	113.56	Coll & CRI NS
S.D.	23.70	30.56	17.59	CRI & WPC NS

* = $p < .05$
** = $p < .01$

the groups were generally within "normal" ranges; no extreme scores were observed.

WORK PREPARATION CENTER RESULTS

Degree of Improvement in the Program

The ETS forms were converted to quantitative indices of improvement by averaging the ratings within each section (Work Performance, Physical Abilities, and Habits and Attitudes). The rating forms had five possible ratings, ranging from "Not Employable" (a score of 0) to "Definitely Employable" (a score of 4). The average of each section was the mean score of all the items in that section. The results from the WPC are illustrated in Table 2, which relates initial ratings to final ratings. At the end of the program 60 percent were rated "Potentially Employable" (given the proper placement) or "Employable" on Work Performance items, 58 percent were rated "Potentially Employable" or "Employable" on Physical Ability items, and 80 percent were rated "Potentially Employable" or "Employable" on the Work Habits and Attitudes items. The final ratings indicate improvement over the initial ratings. Seventeen percent improved on the Work Performance items, 23 percent improved on the Physical Ability items, and 17 percent improved on the Work Habits section.

TABLE 2

PERCENTAGE DISTRIBUTION OF IMPROVEMENT IN PERFORMANCE RATINGS
WPC SAMPLE

Initial Ratings	Final Ratings: Not Employable %	f	Employable Workshop %	f	Potentially Employable %	f	Employable %	f	Definitely Employable %	f	Total N
PERFORMANCE											
Not employable			3.3	1							1
Employable Workshop	3.3	1	23.3	7	6.7	2					10
Potentially employable			10.0	3	40.0	12	6.7	2			17
Employable							3.3	1			1
Definitely employable					3.3	1					1
Total N		1		11		15		3			30
PHYSICAL ABILITIES											
Not employable	13.8	4	3.4	1							5
Employable Workshop			17.2	5	6.9	2					7
Potentially employable			6.9	2	24.1	7	13.8	4			13
Employable					3.4	1	6.9	2			3
Definitely employable							3.4	1			1
Total N		4		8		10		7			29
HABITS & ATTITUDES											
Not employable	3.3	1			3.3	1					2
Employable Workshop			6.7	2							2
Potentially employable			6.7	2	40.0	12	13.3	4			18
Employable					3.3	1	16.7	5			6
Definitely employable			3.3	1			3.3	1			2
Total N		1		5		14		10			30

Intercorrelations of Sections on the ETS Form

Intercorrelations between each of the sections were carried out to determine the factors which were most fundamental to over-all performance. Partial correlations were calculated between each pair of the major sections (Work Performance, Physical Abilities, and Habits and Attitudes) with the influence of the third section held constant. This procedure makes it possible to determine if any variable's influence, once removed, makes a significant difference in the relationships between the others. A variable which reduces the initial correlation between two other variables when its influence is removed is more basic and likely responsible for the original correlation between the other two variables. When intercorrelations and partial correlations were calculated on the sections of the ETS form for the WPC sample, it indicated significant correlations between all of the sections. However, only when the influence of the Work Performance items was held constant did the correlations between the other sections reduce to zero. These results are presented in Table 3.

Correlation Between Client Characteristics and Performance Ratings

For this portion of the results, correlations were calculated between each of the major independent variables and Total Performance plus the Work Performance, Physical Ability, and Habits and Attitudes

TABLE 3

INTERCORRELATIONS AND PARTIAL CORRELATIONS AMONG EACH OF THE ETS SECTIONS

Original Correlations

Work Performance and Physical Abilities = .62**

Work Performance and Habits/Attitudes = .79**

Physical Abilities and Habits/Attitudes = .48*

Partial Correlations

Work Performance and Physical Abilities with Habits/Attitudes Held Constant = .81**

Work Performance and Habits/Attitudes with Physical Abilities Held Constant = .78**

Physical Abilities and Habits/Attitudes with Work Performance Held Constant = .00

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* = $p < .05$
** = $p < .01$

sections. The results from the WPC are presented in Table 4. Total Performance scores on the ETS form were positively and significantly ($p < .05$) related to the Dominance score and ratings of Brain, Brawn, and Hand Dexterity.

The Work Performance section score was significantly ($p < .01$) related to the ratings of Brain, Brawn, and Hand Dexterity.

The Physical Abilities section score was significantly ($p < .01$) related to only the Brawn rating.

The Habits and Attitudes section score was significantly ($p < .01$) related to the Brain and Brawn ratings and to the Attitudes Toward Disabled Persons (ATDP) score. Ratings of Brain approached ($p < .10$) a significant correlation with Habits and Attitudes.

Relationship Between Counselors' Expectations and Ratings on the ETS Form

These results are presented in Table 5. The data indicate that only the counselors' statements of what they expected the highest level of eventual employment to be correlated with any of the ratings. The counselors' expectations correlated with the Total score and the Work Performance section score ($p < .05$). Counselors' ratings of the degree of employability at referral did not agree with the ETS ratings from the WPC, nor did the degree of expected benefit from the program correlate with any of the ETS ratings.

TABLE 4

THE RELATIONSHIP BETWEEN CLIENT CHARACTERISTICS AND PERFORMANCE RATINGS - WORKSHOP SAMPLES

WPC (n=24)	Total Performance	Work Performance	Physical Abilities	Habits & Attitudes
Mach	-.07	-.25	-.24	-.11
I-E	.02	.24	.30	.10
Dominance	.45*	.36	.47*	.24
I-S	-.20	-.15	-.10	-.13
Number of Goals	-.08	-.08	-.08	.17
ATDP-Self	.09	.20	-.11	.56**
ATDP-Other	.02	.06	-.19	.12
Brain	.38*	.54**	.09	.41
Brawn	.38*	.46**	.56**	.49**
Hand Dexterity	.66**	.64**	.31	.46**
E-S	.20	.31	-.14	.32
S-P	.22	-.27	-.16	.31

* = $p < .05$
** = $p < .01$

TABLE 5

CORRELATIONS BETWEEN COUNSELORS' EXPECTATIONS AND PERFORMANCE RATINGS ON THE ETS FORM

	Total Performance	Work Performance	Physical Abilities	Habits/ Attitudes
Current Degree of Employability	.14	.10	.08	.05
Degree of Benefit Expected from the Program	.30	.33	.22	.35
Highest Level of Eventual Employment Expected	.34*	.40*	.12	.21

* = $p < .05$

Client Characteristics and Post-Workshop Success

Post-workshop "success" was defined at the WPC as advancement to further training, placement in employment or active involvement in a placement program. Non-success was defined as termination from the program or dropping out. The independent variables were related to success by dividing the subjects into those who were successful and those who were not and conducting t-tests between each of the differences. These results are presented in Table 6. Three variables showed significant differences between the successful and non-successful groups. These were ratings of Brain, Brawn, and Hand Dexterity. None of the other variables distinguished between the groups. The same variables that correlated significantly with the ETS ratings also correlated with this post-workshop index of success. It would therefore be expected that the ETS ratings themselves would correlate with the post-workshop success criteria. An examination of this relationship was carried out and the results are presented in Table 7. The mean scores on each of the sections of the ETS form and the Total score were compared between the successful and non-successful post-workshop groups. All of the sections and the total score reliability ($p < .01$) discriminated between the groups.

TABLE 6

CLIENT CHARACTERISTICS AND POST-WORKSHOP SUCCESS

	WPC Evaluees		
	Unsuccessful (n=9)	Successful (n=15)	t
Mach			
Mean	46.6	49.0	.55
S.D.	10.2	11.2	
I-E			
Mean	9.5	8.9	.29
S.D.	4.6	4.2	
N	8	15	
I-S			
Mean	5.1	6.1	.74
S.D.	3.01	3.08	
Dominance			
Mean	21.7	23.4	.61
S.D.	5.7	7.2	
ATDP-Self			
Mean	120.5	113.2	.62
S.D.	30.4	27.1	
ATDP-Other			
Mean	110.0	108.0	
S.D.	29.0	31.8	.13
N	9	11	
Number of Goals			
Mean	3.0	2.7	
S.D.	1.6	1.0	.65
N	10	15	
Brain			
Mean	2.6	2.9	
S.D.	.6	.4	1.85*
N	13	22	
Brawn			
Mean	2.6	3.0	
S.D.	.7	.6	1.78*
N	13	22	
Hand Dexterity			
Mean	2.3	2.8	3.5**
S.D.	.5	.4	
N	13	22	
Social Personality			
Mean	2.7	3.0	1.22
S.D.	.5	.7	
N	13	22	
Emotional Stability			
Mean	2.9	3.1	1.08
S.D.	.6	.6	
N	13	22	

* $p < .05$
** $p < .01$

TABLE 7

RATINGS OF PERFORMANCE ON THE ETS FORM AS RELATED TO POST-WORKSHOP SUCCESS

ETS Section	Eventual Success Status		t
	Unsuccessful (n=13)	Successful (n=21)	
Total Performance			
Mean	8.7	6.0	4.29***
S.D.	1.7	1.8	
Work Performance			
Mean	2.9	1.9	5.2**
S.D.	.6	.5	
Physical Abilities			
Mean	2.6	1.8	2.6**
S.D.	.8	.9	
Habits/Attitudes			
Mean	3.1	2.3	3.26**
S.D.	.5	.8	

** = $p < .01$
*** = $p < .001$

Counselors' Expectations and Post-Workshop Success

The counselors' expectations for the client were related to the client's eventual success by comparing the mean counselor rating in the successful and non-successful groups. The only rating which significantly discriminated between the two groups was again the highest level of eventual employment expected by the counselor for the client. These results are presented in Table 8. Clients who were successful had obtained higher ratings on the counselors' expectations for their eventual level of employment. This rating by the counselors also was significantly related to their ETS ratings (see earlier section).

CRI RESULTS

Degree of Improvement in the Program

The CRI sample represents a group of vocational clients who were being given skill training. They were not referred primarily for evaluation as were many of the WPC clients. This difference is reflected in the percentage of persons rated "Potentially Employable" or higher on the ETS rating form, both at the initial and the final administrations. It also supports the aims of the research design to sample a wide variety of abilities. The CRI sample was significantly ($p < .01$) higher than the WPC sample on the ETS form at the initial rating. This was the intention

TABLE 8

COUNSELOR EXPECTATIONS AND POST-WORKSHOP SUCCESS

Counselor's Rating on:	WPC Evaluees		
	Successful	Unsuccessful	t
Present degree of employability			
Mean	3.8	2.4	
S.D.	2.5	1.4	1.74
N	10	15	
Expectation of client's benefit from program			
Mean	6.0	5.4	
S.D.	1.7	2.0	.67
N	6	11	
Highest level of expectation for client			
Mean	4.0	3.1	2.74**
S.D.	.9	.6	
N	10	15	

** = $p < .01$

of the design so that the psychological variables could be assessed for their contributions to "success" across a wide spectrum of abilities. The WPC sample can be thought of as a group who will need considerable adjustment training and counseling, as well as skill training, to achieve a vocational goal. The CRI sample can be thought of as a group closer to the goal of vocational success. The majority of the CRI sample is like a minority of the WPC sample in terms of job skills and job readiness. The results of a comparison between the counselors' expectations for the clients in the CRI sample versus the WPC sample also bear this out.

Table 9 presents data from the CRI sample showing the status of clients on the ETS form at the beginning and at the end of their programs. It also shows the number of people who improved. At the time of the final rating, 95 percent of the sample were considered "Potentially Employable" or better on Work Performance items of the ETS form, 84 percent were considered "Potentially Employable" or better on Physical Ability items, and 89 percent were considered "Potentially Employable" or better on the Habits and Attitudes items.

Fifteen percent of the CRI sample improved up to at least a "Potentially Employable" level on the Work Performance items, 26 percent improved on the Physical Ability items, and there was no improvement on Work Attitudes and Habits.

TABLE 9

PERCENTAGE DISTRIBUTION OF IMPROVEMENT IN PERFORMANCE RATINGS

Initial Ratings	Final Ratings: Not Employable %	f	Employable Workshop %	f	Potentially Employable %	f	Employable %	f	Definitely Employable %	f	Total N
PERFORMANCE											
Not employable											0
Employable Workshop			5.3	1	15.8	3					4
Potentially employable					31.6	6	15.8	3	10.5	2	11
Employable							5.3	1	15.8	3	4
Definitely employable										0	0
Total N				1		9		4		5	19
PHYSICAL ABILITIES											
Not employable											0
Employable Workshop			15.8	3	26.3	5					8
Potentially employable					26.3	5	15.8	3			8
Employable							5.3	1	5.3	1	2
Definitely employable									5.3	1	1
Total N				3		10		4		2	19
HABITS & ATTITUDES											
Not employable	5.3	1									1
Employable Workshop											0
Potentially employable	5.3	1		10.5		2	42.1	8			11
Employable							21.0	4	10.5	2	6
Definitely employable									5.3	1	1
Total N		2				2		12		3	19

As in the WPC sample, if all degrees of improvement are considered, even those which do not bring the person up to a "Potentially Employable" level, then 58 percent of the sample improved to some extent on the Work Performance items, 42 percent on the Physical Ability items, and 53 percent on the Habits and Attitudes items.

Intercorrelations of the ETS Sections for the CRI Sample

Intercorrelations and partial correlations were computed between each of the sections (Work Performance, Physical Abilities, and Habits and Attitudes) on the ETS form for the CRI sample, as was done for the WPC sample. As in the WPC sample, there were significant and substantial intercorrelations among each of the sections. When partial correlations were computed between pairs of the sections with the influence of the third one held constant, all of the correlations remained high except when the Work Performance section was partialled out. When the effects of Work Performance were held constant, the correlation between Physical Abilities and Habits and Attitudes reduced to a non-significant correlation. These results substantiate those found in the WPC sample. The Work Performance items apparently measure some traits and behaviors basic to the other sections and responsible for their intercorrelations.

The Relationship Between Client Characteristics and ETS Ratings

As with the WPC sample, correlations were computed between the scores on the ETS form and the independent variables. Significant and substantial correlations were obtained between Total Performance ratings on the ETS form and scores on Brain, Brawn, Hand Dexterity, and also on Emotional Stability. Significant correlations were also obtained between Work Performance items and Brawn, Hand Dexterity, and Emotional Stability. Physical Abilities on the ETS form correlated significantly with Brain, Brawn, and Hand Dexterity scores. Work Habits and Attitudes items on the ETS form correlated significantly with Emotional Stability and the Attitudes Toward Disabled Persons scores of both the client himself and the person who was indicated as "significant other" by the client.

The results duplicate those found in the WPC sample, with two additions. In the CRI sample, Emotional Stability correlated significantly with most of the sections on the ETS form. This did not occur in the WPC sample. Also, the attitudes of the "significant other" toward disability in the CRI sample correlated significantly with the client's Habits and Attitudes score. These results will be discussed later, as they bear upon the question of how client characteristics and resources interact with the demands of the work or training environment to promote success.

TABLE 10

THE RELATIONSHIP BETWEEN CLIENT CHARACTERISTICS AND PERFORMANCE RATINGS

Variable	Section of ETS Form			
	Total Score	Work Performance	Physical Abilities	Work Habits & Attitudes
Mach	-.17	-.09	-.09	-.27
I-E	-.34	-.30	-.25	-.35
Dominance	-.17	-.25	-.01	-.12
I-S	.09	-.14	.21	-.02
Number of Goals	-.12	-.02	-.09	-.03
ATDP-Self	.23	.20	-.12	.44*
ATDP-Other	.33	.34	.04	.50*
Brain	.75***	.37	.72***	.40
Brawn	.63**	.49*	.90***	.10
Hand Dexterity	.44*	.66***	.48*	.18
E-S	.65***	.52**	.10	.81***

* = $p < .05$
** = $p < .01$
*** = $p < .001$

The Relationship Between Counselors' Expectations and Performance Ratings

The counselors of CRI clients were also asked to state expectations for their clients in terms of the highest level of employment expected in the future, the benefit they expected from the program, and to rate each client's current degree of employability. For the CRI sample, what the counselor expected for the client's eventual level of employment correlated significantly with the ETS rating, both Total scores and two of the sub-section scores. In addition, the counselor's estimate of the client's degree of employability at referral correlated with the Work Performance ratings on the ETS form. The benefit expected from the program correlated significantly with the client's Physical Abilities ratings on the ETS form.

Client Characteristics and Post-Workshop Success

Nineteen people in the CRI sample could be rated as either successful or unsuccessful after their vocational education experiences. Success was defined as advancement to a job or into active placement status with high expectations of job placement. Non-success was defined as termination from the training program because the person was unplaceable or untrainable. The successful and unsuccessful groups were compared on the independent variables by means of t-tests. Two of the

TABLE 11

RELATIONSHIP BETWEEN COUNSELORS' EXPECTATIONS OF CLIENT AND ETS PERFORMANCE RATINGS

Counselors' Expectations	Total Performance	Work Performance	Physical Abilities	Habits Attitudes
Current employability	.39	.44*	.32	.38
Benefit expected	.42	.30	.54*	.21
Highest level of eventual employment	.56**	.59**	.48*	.33

* = < .05
** = < .01

independent variables discriminated between the successful and unsuccessful members. These were the Locus of Control Scale (Internal-External) and the rating of Emotional Stability. Persons who were successful reported higher beliefs in external control and higher ratings of emotional stability. These results are presented in Table 12.

Relationship Between ETS Performance Ratings and Post-Workshop Success

In the CRI sample there were no significant differences between the successful and non-successful clients on the ETS rating form. The mean ratings of even the unsuccessful group were above the "Potentially Employable" in all areas on the ETS form. The mean scores of the successful group were above the "Employable" level in two out of the three sections on the ETS form. The results are presented in Table 13.

These results will be discussed in later sections because they also bear upon the hypothesis regarding a significant interaction between personal characteristics of clients and the demand characteristics of the work environment which promote a successful employment status after vocational education experiences.

COLLEGE RESULTS

Description of Performance Ratings

Of the 25 students included in this sample, four discontinued their studies sometime during the semester. One student had enrolled in

TABLE 12

CLIENT CHARACTERISTICS AND POST-WORKSHOP SUCCESS

	CRI Trainees		
	Successful (n=10)	Unsuccessful (n=9)	t
Mach			
Mean	49.6	44.5	1.05
S.D.	7.5	10.9	
I-E			
Mean	11.2	5.8	
S.D.	4.0	2.6	3.31*
I-S			
Mean	7.4	8.8	1.55
S.D.	2.1	1.3	
Dominance			
Mean	19.9 (n=9)	24.1 (n=8)	
S.D.	2.8	5.0	2.00
ATDP-Self			
Mean	108.0	105.1	.23
S.D.	18.2	28.2	
ATDP-Other			
Mean	111.5	115.0	.33
S.D.	11.6	26.4	
Number of Goals			
Mean	1.9	1.4	.77
S.D.	1.1	1.2	
Brain			
Mean	3.3	3.0	
S.D.	.6	.8	.83
Brawn			
Mean	2.3	2.4	.10
S.D.	1.2	1.0	
Hand Dexterity			
Mean	3.3	3.1	.70
S.D.	.58	.95	
Emotional Stability			
Mean	3.3	2.4	1.96*
S.D.	.75	1.13	

* = $p < .05$
** = $p < .01$

TABLE 13

SUPERVISORS' RATINGS OF PERFORMANCE ON THE ETS FORM AS RELATED TO POST-WORKSHOP SUCCESS

	Successful (n=10)	(CRI)	Unsuccessful (n=9)	t
Total Performance				
Mean	9.5		8.5	.94 n.s.
S.D.	1.9		2.4	
Work Performance				
Mean	3.2		2.7	
S.D.	.7		.9	1.29 n.s.
Physical Abilities				
Mean	2.8		2.7	
S.D.	.8		.7	.13 n.s.
Habits/Attitudes				
Mean	3.4		3.0	
S.D.	.9		1.2	.86 n.s.

classes but had to drop because he could not find an attendant; another discontinued his studies due to medical problems and two dropped out due to employment opportunities.

The remaining 21 students were rated by their professors on class performance, habits and attitudes in class, grades, prediction of graduation, prediction of post-graduation adjustment, and general evaluation of their potential in the class area. All ratings were made on a five-point scale to keep the range of possible scores similar to the other two groups.

In general, the data from Table 14 indicate that these students performed similar to the average college student. However, at colleges where programs for the handicapped are emphasized (Cerritos in particular), many instructors are aware of the handicapped student and make special efforts to help him, and, in fact, grade more leniently[1].

Student Characteristics and Performance Ratings

Each criterion measure in the college sample was correlated with each independent variable. In addition, each teacher was asked to rate each student on his emotional stability independent of his performance in class. The average rating on emotional stability for each student was also correlated with the separate measures of performance.

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[1] A few instructors called the investigators to discuss their ratings, indicating that their criteria for grading differed for the disabled student, and greater efforts were made for encouraging these students.

TABLE 14

DESCRIPTION OF PERFORMANCE RATINGS - COLLEGE SAMPLE

Over-all Performance	Interpretation
$\bar{X}$ = 2.7 S = .4	Average in comparison to usual college students.
Over-all Habits/Attitudes	
$\bar{X}$ = 2.5 X = .8	Average attitudes and work habits in relation to others.
Over-all GPA	
$\bar{X}$ = 2.5 S = .9	Average grade point in college grading system.
Potential for Post-graduation Success	
$\bar{X}$ = 2.5 X = 1.0	Average student, most likely will graduate.
Potential in Field of Course Work	
$\bar{X}$ = 2.3 S = .8	Average performance in individual classes.

TABLE 15

CLIENT CHARACTERISTICS AND PERFORMANCE RATINGS - COLLEGE SAMPLE

Variable	In-class Performance	Habits & Attitudes	GPA	General Estimation of Post-graduation Success
Mach	-.08	-.06	-.05	-.17
I-S	.20	.16	.26	.11
Dominance	.44*	.34	.36	.25
I-E	-.15	-.25	.11	-.23
Number of goals	.38	.04	.50*	.09
ATDP-Self	.21	.45*	.57**	.38
ATDP-Other	.28	-.01	.31	.04
Emotional stability	.68**	.80**	.52**	.60**

* = $p < .05$
** + $p < .01$

The results indicate that the student's attitude toward his disability was significantly correlated with two indices of success: habits and attitudes in class and grade point average. The more the student perceived himself as being similar to and accepted as normal, the higher his grades and the higher his ratings on work habits and attitudes in class.

Dominance was positively correlated with only one rating--the instructor's perception of the student's potential in the particular field of study. Dominance was not significantly related to other performance variables.

The number of personal goals the student listed was significantly correlated with his grade point average. The greater the number of goals he listed for himself, the higher his grades. This was not a significant variable in any of the other samples.

In addition, the mean rating of each student on emotional stability was significantly correlated with all criterion measures of performance. These results will also be discussed later.

RANCHO LOS AMIGOS HOSPITAL FOLLOW-UP

PHASE II

Employment Status at Follow-up

Of the 25 clients from Rancho, 72 percent were employed at follow-up. Most of these had not changed jobs since placement a year previous. The majority of the placements were in unskilled or semi-skilled occupations (56 percent). Many people reported problems in daily living. Most frequent among these were medical problems, money, and boredom. These problems probably stem from the moderately low incomes produced by the occupations these persons held.

Factors Related to Maintenance of Employment

Six variables were examined to determine whether they related to the maintenance of employment in this sample. These were: (1) age, (2) educational level, (3) type of disability, (4) attitudes toward disabled persons, (5) number of services received, and (6) types of services received. None of these variables differentiated the employed and unemployed persons in this sample.

When unemployment occurred, the subjects reported the following reasons: emotional problems (14.3 percent) and family responsibilities (14.3 percent). Health and emotional factors may be important barriers

TABLE 16

RESULTS OF FOLLOW-UP - RANCHO LOS AMIGOS HOSPITAL SAMPLE

Present Employment Status	%	f
Still employed at same job placed	56	14
Employed in different job	16	4
Unemployed	28	7

Number of Months on Job

Range: 0 - 36 months
Mean: 13.1 months
S.D.: 9.7

Type of Employment	At Placement		At Follow-up	
	%	f	%	f
Unskilled/semi	56	14	28	7
Skilled	16	4	8	2
Clerical/sales	16	4	20	5
Technical			0	0
Administrative			4	1
Minor professional	12	3	12	3
Major professional			0	0

General Problems	%	f
None	17.9	5
Health/physical condition	17.9	5
Money	25.0	7
Prosthesis	3.6	1
Job Satisfaction	10.7	3
Education/training opportunities	3.6	1
Alcohol	3.6	1
Social boredom	17.9	5

TABLE 17

COMPARISON OF EMPLOYED AND UNEMPLOYED

	Employed		Not employed		t
Age					
Mean	33.5		37.4		.87
S.D.	10.7		9.0		
Years of Education Completed					
Mean	11.4		12.0		.59
S.D.	1.7		1.9		
n	14		6		
Type of Disability	%	f	%	f	
Orthopedic disabilities	66.7	12	57.2	4	x^2=0.0
Internal disorders	33.3	6	28.6	2	
Brain disorders					
Psychiatric disorders			14.3	1	
Other					
ATDP-Self					
Mean	98		105		.76
S.D.	19.1		10.1		
Number of Services Received					
Mean	3.9		3.9		.06
S.D.	1.1		.9		
Types of Services Received	%	f	%	f	
General evaluation	38	7	28	2	
Cerritos-academic	22	4	28	2	
OJI-work station	27	5	28	2	
Personal/vocational counseling	88	16	100	7	
Skills testing	16	3	14	1	
Casa-halfway residence	33	6	42	3	
Skills evaluation	38	7	42	3	
Placement	50	9	42	3	
Special training	16	3	14	1	
Work Preparation Center	55	10	42	3	

to continuance in employment as well as participation in and completion of vocational educations programs.

Job Satisfaction

Twenty-four percent of the sample had no complaints regarding their present life situation. Of the remaining subjects, money problems were the most prevalent (42 percent). Second in rank of problem areas was health. Other problems were dissatisfaction with present job or lack of a job and inadequate social relations (15.8 percent).

DISCUSSION

PHASE I

Description of the Samples on the Psychosocial Variables

The only differences observed among the psychosocial independent variables were on the measures of interpersonal support and Dominance. The groups were systematically ordered on the interpersonal support measure: the college group had significantly higher scores than either the CRI sample or the WPC sample and the CRI sample had significantly higher scores than the WPC sample. Similarly, the college sample had significantly higher scores on the Dominance measure than either of the other groups. On the other measures, the groups had similar means and variances.

Perhaps the college sample had higher interpersonal support measures because interpersonal support acts as a selective variable and only those severely disabled persons (as most of the college sample were) with high interpersonal support are able to attend college. Severely disabled persons without adequate interpersonal support are not as likely to attend training programs. This is similar to the results found by Kemp and Vash (1971). In that study, quadriplegics were observed to be as productive as paraplegics if interpersonal support was high. When interpersonal support was low, quadriplegics were significantly less productive but paraplegics were not. It was these authors' belief that the specific role of interpersonal support could be either to re-motivate people and help them develop new and purposeful goals in life and/or to aid in the emotional adjustment to the disability.

Talking with the college students in this study reinforced both ideas. They seemed to have more definitive goals for themselves and were also more open (although not necessarily more positive) about their disabilities. In fact, since most of this group was more severely disabled than the other groups, one would expect them to have less positive attitudes toward disability (less positive in the sense of reporting that the disabled are not competitive with normals). The fact that they did not have less positive attitudes attests to their positive outlooks toward life.

WORK PREPARATION CENTER RESULTS

Degree of Improvement in Program

The Physical Abilities section on the ETS form showed the most improvement in the WPC sample. Some individuals improved on the other sections but as a whole, not to a significant extent. The reason more improvement was not noted on the ETS form in other areas is probably due to the nature of the referrals and to the treatment program in the WPC. Many people are referred simply to have work evaluations completed. Some evaluees simply do not improve and the results reflect it. These individuals are usually referred back to the referring agency for further decisions based on the evaluative information. Others are referred for purposes of helping to improve their emotional stability and the ETS form does not measure this well, although it is an important aspect of the treatment program. The WPC sample was selected for study along with other samples from other sites because they were known to have low levels of skills initially and a higher percentage of personal, social, and economic problems.

Results from the WPC sample indicated that scores on the ETS form were significantly related to later indices of success (such as employment status after training). This implies that persons who have enough of the prerequisite abilities and traits (such as emotional

stability and health) and also have relatively high scores on the ETS form, eventually reach a post-workshop "success" status. However, many persons in the WPC sample, and other groups of people like them, have deficits in these prerequisite areas. Other settings, such as CRI, serve people with fewer deficits in the prerequisite areas.

A diagram of the requirements to attain a successful vocational objective might look like the pyramid that follows. The traits at the base of the pyramid are more basic to the others and without them success cannot be attained, or else if attained will be short-lived. When all levels of the pyramid are completed, a successful vocational prognosis can be expected.

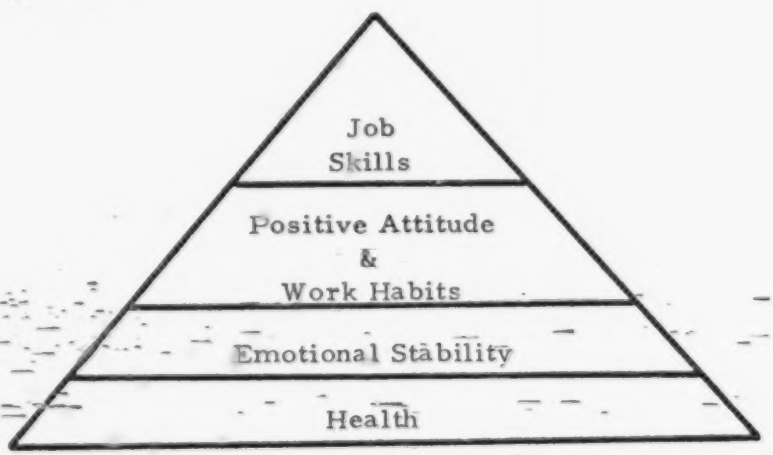

Figure 1: A diagram of the factors important to vocational success.

The WPC sample had more emotional stability problems, poorer work habits and fewer job skills than the CRI sample or the college sample (as evidenced by the results) and not as much improvement would be expected.

Client Characteristics and Performance Ratings

The Total Performance rating on the ETS form was positively related to ratings of Brain, Brawn, and Hand Dexterity and also to the Dominance score taken from the CPI. These results support two of the major hypotheses from the investigation. Dominance apparently is an important resource in vocational rehabilitation. Perhaps those who are more dominant can assert themselves more appropriately and take a greater interest in what they are doing. The Brain, Brawn, and Hand Dexterity ratings were probably important because abilities in these areas are necessary to work performance in this setting. The WPC setting has many industrial tasks, such as assembly and packaging, which require these areas of skill.

The other sections of the ETS form showed somewhat the same results, correlating significantly with the Brain, Brawn, and Hand Dexterity ratings. In addition, Habits and Attitudes section correlated significantly with the expressed attitudes of the client toward his disability. Clients who had more positive attitudes toward disability

also had more positive attitudes toward work. This strongly suggests that personal adjustment factors among the disabled (such as personal attitudes) are important for success. When a client expresses a dislike for work and training or has a poor attitude toward work, he may be conveying something about how he feels about being disabled and having to work in this kind of setting.

Counselors' Expectations of Eventual Employment and Performance Ratings

Of all the ratings taken from the counselors, their expectations of the client's eventual employment level correlated significantly with the actual ETS ratings. Apparently, counselors can gauge somewhat accurately who is likely to be employable and who is not. Interestingly, the counselors are able to look beyond the client's abilities when first referred and see him in the future. This interpretation follows from the fact that the ETS form measures employability and at the time of referral there was no correlation between the counselors' estimates of current employability and the ETS ratings. However, there was a significant correlation with future employability. Some clients apparently were not employable at referral but the counselor saw potential in them.

Client Characteristics and Post-Workshop Success

Three of the independent variables significantly predicted post-workshop success. These were again ratings of Brain, Brawn, and Hand Dexterity. None of the other variables significantly distinguished between the groups. This again highlights the requirement of possessing some job skills in order to advance to further training or employment. Both the unsuccessful and the successful groups had about the same degree of emotional stability; the successful group being slightly higher on this measure. These results probably mean that persons with greater abilities were able to work better (since they also did better on the ETS form) and were "recommended" for advancement. The most distinguishing factor was Hand Dexterity. This result likely occurred because most advanced training or employment for these people is in jobs requiring this skill.

ETS Ratings and Post-Workshop Success

The ETS form discriminated very well between those who achieved a successful closure and those who did not. Each of the sections and the Total score showed significant differences. The largest difference occurred on the Work Performance section. The instrument thus appears to have good post-workshop predictiveness.

Counselors' Expectations and Post-Workshop Success

Again, the counselors were able to make significantly accurate predictions of post-workshop success. The expectations for the group which was successful were significantly higher on the counselors' estimate of the highest level of employment expected. This result is meaningful for applied purposes because it indicates that counselors can gauge long-term success in many cases and thus will aid them in making decisions of a program nature.

CRI RESULTS

Improvement in the Program

The CRI sample had higher initial ratings than the WPC sample and they also improved to a greater extent. This is probably due to the fact that they had more of the prerequisite abilities, such as emotional stability, and the training could focus more on the job training aspects of employment. In terms of the diagram presented in Figure 1, a greater number of people were beyond the basic level.

Client Characteristics and ETS Performance Ratings

With just two exceptions, the results from the CRI sample resemble the results from the WPC sample. Brain, Brawn, and Hand Dexterity correlated significantly with the Total Ratings and most of the other

ratings, as in the WPC sample. Also as in the WPC sample, the attitudes of the clients toward their disabilities correlated significantly with their attitudes toward work. The results in the CRI group which differed from the WPC group were the role of Emotional Stability and the attitudes of the "significant others."

Emotional Stability ratings correlated significantly with each of the ratings on the ETS form in the CRI group except the Physical Abilities section. Very high correlations were obtained between Emotional Stability and the Work Habits and Attitudes section and between Emotional Stability and the Total score. Apparently, in this sample Emotional Stability plays a greater role in determining individual differences in performance than in the WPC sample. This result may be due to the greater demands placed on the trainees to meet production quotas and the rigors of the job situation (CRI more closely simulates competitive industry). Emotional Stability shows its influence here, whereas in the WPC it did not.

The other exception in the CRI sample was the fact that the attitudes of the "significant others" also correlated with the rated habits and attitudes of the client. This relationship was predicted and confirms one of the hypotheses of the study. This relationship could indicate that the client's attitudes toward work and his work habits are shaped in part

by those around him. If his "significant others" view the client as competitive with and equal to the normal population (as higher scores on the ATDP would indicate), they they might be more prone to reinforce his attempts and otherwise encourage him in vocational endeavors. The relationship might also work the other way. Clients who act competitive with the normal population are apt to create positive attitudes in their "significant others." The better they work and more competitive they appear, the more positive the attitudes of others are apt to be toward them. The WPC sample, on the other hand, had relatively few people with as many skills and abilities for work as the CRI sample (as indicated on the ETS form) and thus their "significant others" attitudes may not have been influenced in the same manner. While these results are tentative, they do offer some suggestive hypotheses for further study.

Counselors' Expectations for Client and ETS Performance Ratings

As in the WPC sample, counselors were able to predict the clients who had the best abilities. Interestingly also, it was the ratings of future levels of employment which correlated the highest with rated performance, indicating that counselors might be looking a long way ahead when they refer a client for training. It is also possible that this latter rating, being more global than the others, made it feasible for them to predict validly, whereas the other more specific ratings did not.

Client Characteristics and Post-Workshop Success

Only two variables significantly discriminated between the successful and unsuccessful groups in the CRI sample. These were Emotional Stability ratings and the Locus of Control variable (internal versus external locus of control). Greater Emotional Stability was associated with more success. Emotional Stability also correlated significantly with the ETS ratings for the CRI sample. In the CRI sample, most of the clients had fairly high levels of skills on Brain, Brawn, and Hand Dexterity. Thus Emotional Stability became the discriminating variable. The result does not mean that Brain, Brawn, and Hand Dexterity were not important; they were simply not the discriminating factors. This finding is in agreement with the results of Vash and Murray (1969) and Kemp (1972) who found that both adequate resources on Brain, Brawn, and Hand Dexterity and adequate Emotional Stability were required to obtain employment after vocational education training. This supports one of the hypotheses of the study: the closer a person moves toward an employment status competitive with the normal population, the more important is emotional stability. Successful closures from CRI were largely into competitive jobs. Successful closures from WPC were mostly into training programs, which require resources for developing job skills more than emotional stability. It is when the person meets

the demands and stresses of actual competitive labor that emotional stability shows its influence. This point of view will be pursued further in a later section.

The other variable which discriminated between the successful and unsuccessful subjects in the CRI sample was the locus of control factor. However, this did not support the hypothesis of the study because the successful group expressed stronger beliefs in external control. The mean score of the successful group was almost twice the score of the unsuccessful group (the higher the score, the more the belief in external control). Interpretations of this result must be especially cautious. However, it is not likely a chance relationship because Kemp (1972) found the same outcome in another study of clients who were followed up after closure. Both studies show a belief in external control to be associated with success, when success is measured by attainment of employment. Perhaps a belief in external control helps people deal with the stresses of employment by attributing the stress to outside factors. Then the person would be less likely to view it as his "fault" and perhaps be better able to objectively deal with it.

Relationship Between ETS Performance Ratings and Post-Workshop Success

There were no significant differences between the successful and non-successful persons on the ETS rating form in the CRI sample. All

of the ratings were fairly high for both the successful and unsuccessful groups. This finding is consistent with the earlier results from the CRI sample which showed that ratings of Brain, Brawn, and Hand Dexterity did not correlate with post-workshop indices of success. Since Brain, Brawn, and Hand Dexterity correlated substantially with the ETS form ratings, it would follow that the ETS ratings would not relate to post-workshop success either. Again, after a certain level of skill is reached, it appears that the more critical dimension relevant for post-workshop success is emotional stability.

Theoretical Point of View Regarding the Interaction Between Client Characteristics and Success in Different Vocational Programs

The data from both workshop samples and the results from Kemp's (1972) other investigation lead to the following hypothesis: the closer disabled clients move toward the vocational goal of employment in competitive labor, the greater relative importance emotional stability plays in their success, until the point is reached where job skills and emotional stability are both equally important.

The earlier study by Kemp (1972) found that Emotional Stability ratings and Social Personality ratings determined the success status of disabled clients a year after closure. Even persons with adequate job skills did not maintain employment without emotional stability. The

data from the CRI sample in this study support the hypothesis because this was a group in which success was largely a matter of becoming employed in competitive labor. Again, job skill factors did not discriminate between those who became employed and those who did not, but Emotional Stability did. Here, job skill factors were relatively high in both groups. Selectivity has already been exercised in determining who would reach this level. The WPC group, on the other hand, was a less select group, with fewer job skills. Success for them was usually advancement to further training. Here the discriminating factors were job skill factors. Emotional stability did not significantly relate to their post-workshop success, although in some cases clients were terminated, especially early in treatment because of this factor. When the "successful" subjects from the WPC sample (those who were advanced to more training) reach an employment readiness status, then emotional stability is likely to be more important to them.

The hypothesized relationship between stages of employment readiness and client characteristics is illustrated in the following graph.

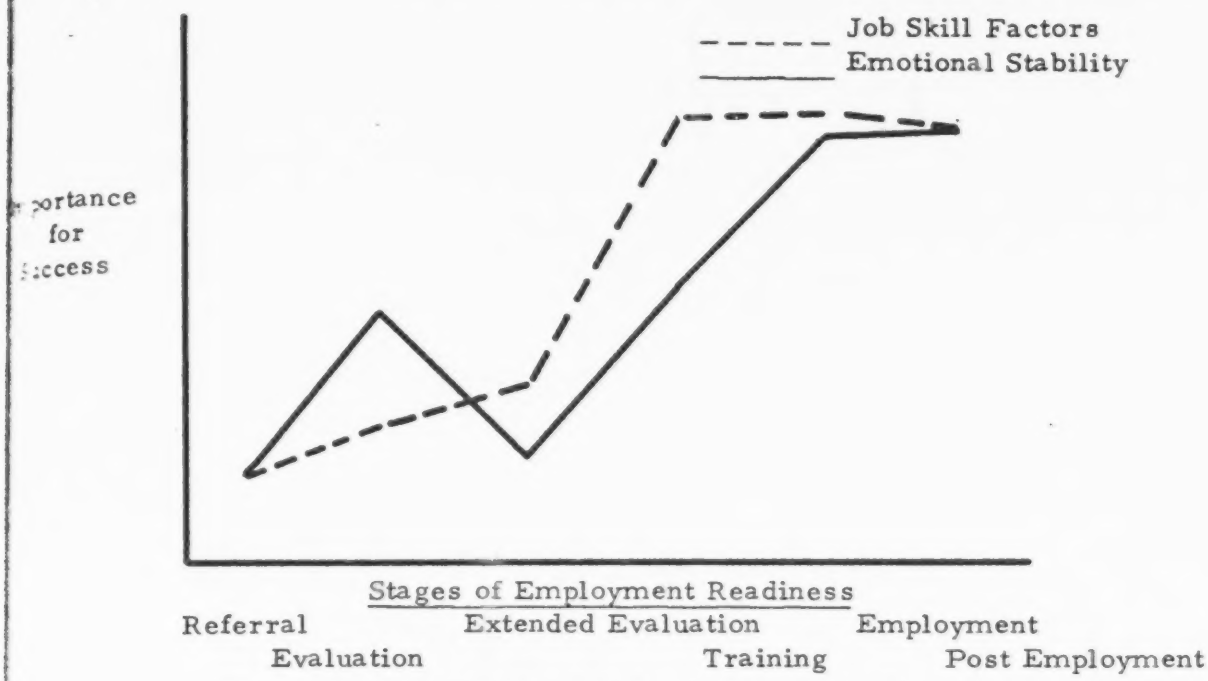

Figure 2: The relationship between stages of employment readiness and client characteristics.

Emotional stability and job skill factors are relatively less important at referral because less is expected from the client. Of course, not all vocational education settings will accept people at this stage. CRI accepts only people who are judged ready for training. Emotional stability is important during initial evaluations because persons with extreme emotional stability difficulties are apt to be selected out and/or referred for other services. During extended evaluation or treatment or job readiness, skill factors, such as Brain, Brawn, and Hand Dexterity, are becoming important. Problems in adjustment are treated

and tolerated in those vocational settings serving clients in this stage of their career development. Success in training is determined largely by job skills at this point. People who advance to further training have good job skills. By the time of employment, however, emotional stability and job skill factors are both important. Long-term employment stability is also determined by both factors, as the results of the Kemp (1972) and Vash and Murray (1969) studies have shown. At this stage of the process, the person has become aware of all of the demands placed on him and the difficulties associated with independent living. Maintenance of a job requires continued ability to cope with stress and may also require continued post-employment counseling.

COLLEGE RESULTS

Student Characteristics and College Performance

In the college sample, ratings of Emotional Stability correlated substantially with each of the indices of success. This fact again highlights the importance of emotional stability in contributing to success in environments which involve competition with non-disabled persons.

In the college sample, greater numbers of personal goals were associated with higher grades. Perhaps education is more relevant to students who can make long range plans, motivating them to make higher

grades. Also, this sample was more severely disabled than the other groups (a larger proportion were quadriplegic and had brain disorders). The importance of establishing goals after disability may be most important for severely disabled persons. In support of this, Kemp and Vash (1971) found that among severely disabled individuals the number of goals expressed by the person related to their rated adjustment. However, this relationship does not hold in heterogeneous samples of disabled people (Kemp, 1972). Furthermore, in the present study the number of goals expressed by the disabled students correlated significantly with the attitudes of their "significant others." Apparently, people close to the disabled person can help motivate him and reinforce him for setting goals. Thus, the role of significant others may be indirect.

Within the college sample, attitudes toward disability were also correlated with two indices of school success: habits and attitudes in class and grade point average. This result probably can be interpreted to mean that disabled persons who feel accepted as normal and feel they are capable of competing with normals actually attempt it and are then probably further accepted and treated as normal. This variable deserves further study in subsequent research because of the importance of attitudinal variables in coping and adjustment.

PHASE II

Follow-up of Employed Persons

Seventy-two percent of the Rancho Los Amigos Hospital follow-up cases were still employed a year after placement. This figure compares favorably with other institutions, and considering the severity of the disabilities served by Rancho, is quite favorable.

None of the variables assessed in relation to maintenance of employment proved significant. This may be due to the small number of unemployed persons, which would make statistical significance difficult to achieve.

Most people were satisfied with their jobs. When they were not, it was because of money difficulties or limited advancement opportunities. Reasons for unemployment, when it occurred, were due to reported ill health or emotional difficulties. Perhaps continued follow-up after employment would ease the transition for these persons and reduce the number of unemployed cases. General dissatisfaction with life resulted from medical problems and loneliness. Dealing with these problems should possibly be stressed more in the rehabilitation setting.

SUMMARY OF THE PROJECT

The purpose of this investigation was to delineate some of the characteristics of disabled clients which contribute significantly to their success in vocational education programs. The performance of clients in three types of vocational education programs was examined to determine if the factors contributing to objective measures of success varied as a function of the program demands or the client/student's initial abilities. An additional part of the project was devoted to a follow-up of clients who had been placed in employment in order to gauge their long-term stability and factors which potentially relate to their maintenance of employment. The three study samples were a college sample, a skill training sample, and a work evaluation/work experience sample.

The subjects of the study were interviewed and observed in their programs and several theoretically important measures were assessed. Among these were the client's work assets, including ratings on the dimensions of Brain, Brawn, Hand Dexterity, and Social Personality. Also, ratings of Emotional Stability were also made. Additional assessments were made of the person's goals, his losses produced by his disability, his degree of interpersonal support from family and friends, his attitudes toward his disability, his belief in his own determination

over his life, his interpersonal dominance, and his ability to "manage" other people. Success in the workshop settings was measured by objective checklists with proven reliability and by the attainment of employment or advancement to further training or placement readiness. Success in the college sample was measured by ratings from professors and by grade point average.

The primary results of the study were as follows: The samples were significantly different on two of the independent variable measures. The college sample reported significantly more interpersonal support and was more dominant than the other groups. They were also more severely disabled. Interpersonal support and dominance may act selectively, such that only severely disabled individuals who have these traits are capable of attending a rigorous college program.

In the work evaluation sample (a sample with fewer initial abilities who were referred for evaluation and remediation of basic work behaviors, such as work attitudes and work tolerance), several of the independent variables correlated significantly with the objective measure of work performance. The ratings of Brain, Brawn, and Hand Dexterity at entry predicted training improvement and final levels of training proficiency. Additionally, the measure of dominance and attitudes toward disability also correlated significantly with some

aspects of work performance. The disabled person's attitudes toward disability correlated significantly with attitudes toward work. Dominance correlated significantly with most work performance ratings. Later, when the clients of this program had reached a closure status, the first three variables predicted advancement to further training and/or entry into employment. The measure of work performance used in the workshop setting also significantly related to post-workshop success.

In the work training sample (a sample with higher initial abilities who were referred for skill training and job placement), most of the same variables correlated with the measure of workshop performance. Brain, Brawn, and Hand Dexterity correlated significantly with measured work performance in the training setting. In addition, the measure of Emotional Stability also predicted training performance, although it had not in the work evaluation sample. The attitudes of these persons toward their disabilities also correlated significantly with their attitudes toward work. When these persons reached a closure status, two variables predicted their success in terms of employment. These were the measure of Emotional Stability and the nature of the person's belief in whether or not he controlled his own behavior and rewards in life. Those with higher Emotional Stability scores achieved more employment success; surprisingly, the employed group also professed

stronger beliefs that their lives were controlled by factors beyond their control. Brain, Brawn, and Hand Dexterity scores did not predict post-training employment success in this sample because the scores were all high. Thus, the scores did not discriminate between the successful and non-successful persons.

The over-all results were interpreted to mean that employment success for disabled persons is determined by different factors over the long process of vocational readiness. Criteria of success early in training are advancement to better training and this requires job skills and a positive attitude toward work. However, later success in such a group requires the additional factor of emotional stability. The hypothesis was advanced that the closer disabled persons such as these get to competition with the normal population in employment situations, the more important personal adjustment factors become, until ultimate success requires both job skills and the presence of personal adjustment.

This hypothesis gained support in the college sample. Emotional Stability ratings and the students' attitudes toward disability correlated significantly with most indices of success in college. In addition, the number of goals the disabled person reported also correlated with his college success, as measured by his grade point average. The presence of goals did not correlate with success in other groups and this was

attributed to the fact that the college sample was more severely disabled as a group than the others. The presence of goals, which may be a gross measure of re-motivation or the adoption of new values after disability, may only be important after a severe disability. This interpretation is supported by an earlier investigation (Kemp and Vash, 1971) in which it was found that among severely disabled persons the number of goals reported correlated significantly with the degree of "productivity" attained.

Follow-up of people who had attained employment indicated that close to 75 percent maintained this status a year after placement. Those who did not remain employed reported that medical and personal adjustment factors were important. Even those who remained employed reported some significant problems; most notable among these were medical complications, loneliness (probably produced in large part by their low income level which limited social activities) and the actual low wages received. Follow-up counseling and re-referrals were offered as two suggestions for improving employment stability and morale.

REFERENCES

Christie, and Geis, Florence L., Studies in Machiavellianism. New York: Academic Press, 1970.

Gough, H. G., Manual for the California Psychological Inventory. Palo Alto: Consulting Psychologists Press, Inc., 1965.

Kemp, B. J., and Vash, C. L., Productivity after injury in a sample of spinal cord injured persons: A pilot study. Journal of Chronic Disease, 1971, 24, 259-275.

Rotter, J. B., Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80: 1-28.

Seeman, M., Alienation and social learning in a reformatory. American Journal of Sociology, 1964, 69, 270-284.

Seeman, M., and Evans, J. W., Alienation and learning in a hospital setting. American Sociological Review, 1962, 27, 772-782.

Tiffany, D. W., Experienced control and work inhibition. Vocational Guidance Quarterly: 1969, 8, 137-143.

Yuker, H. E., Block, J. R., and Young, J. H., The Measurement of Attitudes Toward Disabled Persons. Albertson, New York: Human Resources Center, 1966.

APPENDICES

IA Description of the Sample (Phase I)

IB Description of Follow-up Sample (Rancho Los Amigos Hospital)

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APPENDIX IA

DESCRIPTION OF THE SAMPLES (PHASE I)

Characteristic	College % (f)	Workshop Evaluees (WPC) % (f) n=35	Trainees (CRI) % (f)
Sex			
Male	48 (17)	80 (38)	58 (15)
Female	32 (8)	20 (7)	32 (7)
Marital Status			
Single	76 (19)	52 (22) 62%	40.9(9)
Married	8 (2)	16 (5) 14.3	36.4(8)
Divorced	16 (4)	28 (7) 20.0	13.6(3)
Separated		4 (1) 2.8	4.5(1)
Widowed			4.5(1)
Age			
Range	18-47	17-60	22-52
$\bar{X}$	23.68	28.54	33.0
S	7.73	9.54	11.74
17-23 years	68 (17)	40.0(14)	36.4(8)
24-29	12 (3)	22.9(8)	18.2(4)
30-35	12 (3)	14.3(5)	9.1(2)
36-40	0	14.3(5)	0
41-46	4 (1)	2.8(1)	18.2(4)
47-52	4 (1)	2.8(1)	18.2(4)
53-58		0	
59-64		2.8(1)	
Education			
Range	8-14	3-12.5	8-14
$\bar{X}$	12.3	11.0	11.3
S	1.3	2.1	1.4
0-8 years	4 (1)	8.6(3)	4.5(1)
9-11	12 (3)	37.1(13)	36.4(8)
12 (high school graduate)	44 (11)	37.1(13)	45.4(10)
13-15	44 (11)	11.4(4)	9.1(2)
16+ (college graduate)			
Unknown			4.5(1)
Vocational History			
None	48 (12)	11.4(4)	13.6(3)
Part-time only	28 (7)	17.1(6)	13.6(3)
Full-time	24 (6)	71.4(25)	72.7(16)

APPENDIX IA (cont'd)

Characteristic	College %	College (f)	Workshop Evaluees (WPC) %	Workshop Evaluees (WPC) (f)	Trainees (CRI) %	Trainees (CRI) (f)
Type of Previous Work						
None	48	(12)	11.4	(4)	13.6	(3)
Unskilled/semi-skilled	12	(3)	65.7	(23)	72.7	(16)
Skilled	8	(2)	8.6	(3)	9.1	(2)
Clerical/Sales	24	(6)	11.4	(4)		
Technical	8	(2)			4.5	(1)
Administrative			2.8	(1)		
Minor professional						
Major professional						
Living Arrangements						
Institution	0		5.7	(2)	4.5	(1)
Board & Care	8	(2)	25.7	(9)	0	
Dormitory	24	(6)	0		0	
Apartment/home with relatives, family	24	(6)	31.4	(1)	36.4	(8)
Apartment/home with non-relative	16	(4)	0		4.5	(1)
Apartment/home alone	20	(5)	20.0	(7)	9.1	(2)
Apartment/home with own family, spouse	8	(2)	17.1	(6)	45.4	(10)
Type of Disability						
Orthopedic	92	(23)	34.3	(12)	40.9	(9)
Internal	0	0	14.3	(5)	22.7	(5)
Brain	4	(1)	37.1	(13)	9.1	(2)
Psychiatric	0	0	8.6	(3)	22.7	(5)
Other	4	(1)	5.7	(2)	4.5	(1)

APPENDIX IB

DESCRIPTION OF FOLLOW-UP SAMPLE - RLAH (PHASE II) (n = 25)

	%	(f)
Sex		
Male	80	20
Female	20	5
Marital Status		
Single	32	8
Married	40	10
Divorced	20	5
Separated	8	2
Widowed		0
Age		
Range 22-53		
Mean 35.31		
S.D. 10.67		
22-25	24	6
26-30	12	3
31-35	28	7
36-40	8	2
41-45	4	1
46-50	4	1
51-55	20	5
Education		
Range 8-14 years		
Mean 11.5		
S.D. 1.7		
0- 8 years	8	2
9-11	20	5
12 (high school graduate)	40	10
13-15	20	5
16+ (college graduate)	0	0
Not known	12	3
Vocational History-Type of Previous Work		
0 None	20	5
1 Unskilled/semi-skilled	40	10
2 Skilled	28	7
3 Clerical/sales	8	2
4 Technical	4	1
5 Administrative		
6 Minor professional		
7 Major professional		
Type of Disability		
Orthopedic disabilities	67.8	16
Internal disorders	25.0	7
Brain disorders	0.0	0
Psychiatric disorders	3.6	1
Other	3.6	1

APPENDIX II

CLIENT INTERVIEW SCHEDULE

INTERVIEW INFORMATION

Name _____ Date of interview _____

Date of birth _____ Phone _____ Marital status _____

Disability _____ Onset of disability _____

Circumstances surrounding disability _____

_____

Vocational and educational history _____

_____

_____

_____

_____

_____

_____

Family characteristics _____

_____

_____

_____

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_____

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_____

_____

_____

Evidence of interpersonal support or lack of it _____

Program now _____

Avocational/leisure activities _____

Home responsibilities _____

Goals now _____

Problems now _____

_____

_____

_____

_____

Losses due to disability _____

_____

_____

_____

APPENDIX III

MACH IV

Directions: People hold various ideas and opinions regarding other people, world events, and things in general. The questions below ask for your ideas on a number of topics. Please indicate how you feel about these by circling the most appropriate answer on the accompanying answer sheet. Your first impression is usually most accurate, so do not take a lot of time considering each question.

1. The best way to handle people is to tell them what they want to hear.
2. When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which might carry more weight.
3. Anyone who completely trusts anyone else is asking for trouble.
4. It is hard to get ahead without cutting corners here and there.
5. Honesty is the best policy in all cases.
6. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.
7. Never tell anyone the real reason you did something unless it is useful to do so.
8. One should take action only when sure it is morally right.
9. It is wise to flatter important people.
10. All in all, it is better to be humble and honest than important and dishonest.
11. Barnum was very wrong when he said there's a sucker born every minute.
12. It is possible to be good in all respects.
13. Most people are basically good and kind.
14. There is no excuse for lieing to something else.
15. Most men forget more easily the death of their father than the loss of their property.
16. Most people who get ahead in the world lead clean, moral lives.
17. Generally speaking, men won't work hard unless they're forced to do so.
18. The biggest difference between most criminals and other people is that criminals are stupid enough to get caught.
19. Most men are brave.

The Influence of Psychosocial Factors on the Success of Disabled Persons in Different Vocational Education Settings

Name_____

MACH IV ANSWER SHEET

	DISAGREE		NEUTRAL	AGREE	
	a lot	a little		a little	a lot
1.)	1	2	3	4	5
2.)	1	2	3	4	5
3.)	1	2	3	4	5
4.)	1	2	3	4	5
5.)	1	2	3	4	5
6.)	1	2	3	4	5
7.)	1	2	3	4	5
8.)	1	2	3	4	5
9.)	1	2	3	4	5
10.)	1	2	3	4	5
11.)	1	2	3	4	5
12.)	1	2	3	4	5
13.)	1	2	3	4	5
14.)	1	2	3	4	5
15.)	1	2	3	4	5
16.)	1	2	3	4	5
17.)	1	2	3	4	5
18.)	1	2	3	4	5
19.)	1	2	3	4	5

APPENDIX IV

I-E SCALE

Directions: This test asks for your opinions about people and about various things that happen to them. The questions are arranged in pairs. After reading each question of the pair, pick the one you think is most true. Answer by filling in the appropriate mark on the answer sheet.

1. a. Children get into trouble because their parents punish them too much.
   b. The trouble with most children nowadays is that their parents are too easy with them.
2. a. Many of the unhappy things in people's lives are partly due to bad luck.
   b. People's misfortunes result from the mistakes they make.
3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
   b. There will always be wars, no matter how hard people try to prevent them.
4. a. In the long run people get the respect they deserve in this world.
   b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. a. The idea that teachers are unfair to students is nonsense.
   b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. a. Without the right breaks one cannot be an effective leader.
   b. Capable people who fail to become leaders have not taken advantage of their opportunities.
7. a. No matter how hard you try, some people just don't like you.
   b. People who can't get others to like them don't understand how to get along with others.
8. a. Heredity plays the major role in determining one's personality.
   b. It is one's experiences in life which determine what they're like.
9. a. I have often found that what is going to happen will happen.
   b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
10. a. In the case of the well prepared student there is rarely if every such a thing as an unfair test.
    b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11. a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
    b. Getting a good job depends mainly on being in the right place at the right time.
12. a. The average citizen can have an influence in government decisions.
    b. This world is run by the few people in power, and there is not much the little guy can do about it.
13. a. When I make plans, I am almost certain that I can make them work.
    b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. a. There are certain people who are just no good.
    b. There is some good in everybody.
15. a. In my case getting what I want has little or nothing to do with luck.
    b. Many times we might just as well decide what to do by flipping a coin.
16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
    b. Getting people to do the right thing depends on ability, luck has little or nothing to do with it.
17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
    b. By taking an active part in political and social affairs the people can control world events.
18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
    b. There really is no such thing as "luck."
19. a. One should always be willing to admit mistakes.
    b. It is usually best to cover up one's mistakes.
20. a. It is hard to know whether or not a person really likes you.
    b. How many friends you have depends upon how nice a person you are.
21. a. In the long run the bad things that happen to us are balanced by the good ones.
    b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
22. a. With enough effort we can wipe out political corruption.
    b. It is difficult for people to have much control over the things politicians do in office.

23. a. Sometimes I can't understand how the teachers arrive at the grades they give.
    b. There is a direct connection between how hard I study and the grades I get.
24. a. A good leader expects people to decide for themselves what they should do.
    b. A good leader makes it clear to everybody what their jobs are.
25. a. Many times I feel that I have little influence over the things that happen to me.
    b. It is impossible for me to believe that chance or luck plays an important role in my life.
26. a. People are lonely because they don't try to be friendly.
    b. There's not much use in trying too hard to please people, if they like you, they like you.
27. a. There is too much emphasis on athletics in high school.
    b. Team sports are an excellent way to build character.
28. a. What happens to me is my own doing.
    b. Sometimes I feel that I don't have enough control over the direction my life is taking.
29. a. Most of the time I can't understand why politicians behave the way they do.
    b. In the long run the people are responsible for bad government on a national as well as on a local level.

NAME _____

I-E SCALE ANSWER SHEET

Directions: Answer by filling in the circle next to the appropriate letter.

1. a. O
   b. O

2. a. O
   b. O

3. a. O
   b. O

4. a. O
   b. O

5. a. O
   b. O

6. a. O
   b. O

7. a. O
   b. O

8. a. O
   b. O

9. a. O
   b. O

10. a. O
    b. O

11. a. O
    b. O

12. a. O
    b. O

13. a. O
    b. O

14. a. O
    b. O

15. a. O
    b. O

16. a. O
    b. O

17. a. O
    b. O

18. a. O
    b. O

19. a. O
    b. O

20. a. O
    b. O

21. a. O
    b. O

22. a. O
    b. O

23. a. O
    b. O

24. a. O
    b. O

25. a. O
    b. O

26. a. O
    b. O

27. a. O
    b. O

28. a. O
    b. O

29. a. O
    b. O

APPENDIX V

DOMINANCE AND INTERPERSONAL SUPPORT SCALES (COMBINED)

If true for you, write (T) beside the item; if not, write (F).

* 1. My family or friends do not express a lot of interest in my achievements.

2. I doubt whether I would make a good leader.

3. I think I would enjoy having authority over other people.

4. I find it hard to keep my mind on a task or job.

5. I have sometimes stayed away from another person because I feared doing or saying something that I might regret afterwards.

* 6. My family or friends give me frequent support and encouragement.

7. When in a group of people I have trouble thinking of the right things to talk about.

8. School teachers complain a lot about their pay, but it seems to me that they get as much as they deserve.

9. I don't blame anyone for trying to grab all he can get in this world.

10. Every citizen should take the time to find out about national affairs, even if it means giving up some personal pleasures.

* 11. It takes a near crisis before someone offers to help me.

12. I should like to belong to several clubs or lodges.

13. I am certainly lacking in self-confidence.

14. When I work on a committee I like to take charge of things.

15. If given the chance I would make a good leader of people.

* 16. I receive frequent expressions of confidence from my family or friends.

17. Sometimes at elections I vote for men about whom I know very little.

18. I very much like hunting.

19. A person does not need to worry about other people if only he looks after himself.

APPENDIX V (cont'd)

20. I can honestly say that I do not really mind paying my taxes because I feel that's one of the things I can do for what I get from the community.

* 21. My family likes to hear about my experiences.

22. When the prices are high you can't blame a person for getting all he can while the getting is good.

23. In school I found it very hard to talk before the class.

* 24. I am comfortable expressing even my bad feelings to my family or friends.

25. I am a better talker than a listener.

26. I would be willing to give money myself in order to right a wrong, even though I was not mixed up in it in the first place.

27. We should cut down on our use of oil, if necessary, so that there will be plenty left for the people fifty or a hundred years from now.

28. When the community makes a decision, it is up to a person to help carry it out even if he had been against it.

29. I would rather have people dislike me than look down on me.

* 30. Not many people really care what happens to me.

31. I must admit I try to see what others think before I take a stand.

32. People should not have to pay taxes for the schools if they do not have children.

33.3In a group, I usually take the responsibility for getting people introduced.

* 34. I receive encouragement for trying new things.

35. I would be willing to describe myself as a pretty "strong" personality.

36. There are times when I act like a coward.

37. I must admit I am a pretty fair talker.

* 38. I could be described as having no close personal friends.

39. I have strong political opinions.

40. I think I am usually a leader in my group.

41. Disobedience to any government is never justified.

42. I enjoy planning things, and deciding what each person should do.

43. I would rather not have very much responsibility for other people.

44. I usually have to stop and think before I act even in trifling matters.

45. It is pretty easy for people to win arguments with me.

46. I have not lived the right kind of life.

* 47. When I am unhappy I don't like to show it because it upsets my family too much.

48. I like to give orders and get things moving.

49. I am embarrassed with people I do not know well.

50. The one to whom I was most attached and whom I most admired as a child was a woman (e.g., mother, sister, aunt, or other woman).

51. I'm not the type to be a political leader.

52. People seem naturally to turn to me when decisions have to be made.

53. I dislike to have to talk in front of a group of people.

54. I have more trouble concentrating than others seem to hav.

* Items of Interpersonal Support Scale; all others comprise the Dominance Scale.

ATDP SCALE

EAD EACH STATEMENT AND PUT AN "X" IN THE APPROPRIATE COLUMN ON HE ANSWER SHEET. DO NOT MAKE ANY MARKS ON THE QUESTION SHEETS.

PLEASE ANSWER EVERY QUESTION

---

1. Disabled persons are usually friendly.
2. People who are disabled should not have to pay income taxes.
3. Disabled people are no more emotional than other people.
4. Disabled persons can have a normal social life.
5. Most physically disabled persons have a chip on their shoulder.
6. Disabled workers can be as successful as other workers.
7. Very few disabled persons are ashamed of their disabilities.
8. Most people feel uncomfortable when they associate with disabled people.
9. Disabled people show less enthusiasm than non-disabled people.
10. Disabled people do not become upset any more easily than non-disabled people.
11. Disabled people are often less aggressive than normal people.
12. Most disabled persons get married and have children.
13. Most disabled persons do not worry any more than anyone else.
14. Employers should not be allowed to fire disabled employees.
15. Disabled people are not as happy as non-disabled ones.
16. Severely disabled people are harder to get along with than are those with minor disabilities.
17. Most disabled people expect special treatment.
18. Disabled persons should not expect to lead normal lives.
19. Most disabled people tend to get discouraged easily.
20. The worst thing that could happen to a person would be for him to be very severely injured.

ATDP SCALE

21. Disabled children should not have to compete with non-disabled children.

22. Most disabled people do not feel sorry for themselves.

23. Most disabled people prefer to work with other disabled people.

24. Most severely disabled persons are not as ambitious as other people.

25. Disabled persons are not as self-confident as physically normal persons.

26. Most disabled persons don't want more affection and praise than other people.

27. It would be best if a disabled person would marry another disabled person.

28. Most disabled people do not need special attention.

29. Disabled persons want sympathy more than other people.

30. Most physically disabled persons have different personalities than normal persons.

CODE # _____ ATDP SCALE ANSWER SHEET FORM

Use this answer sheet to indicate how much you agree or disagree with each of the statements about disabled people on the attached list. Put an "X" through the appropriate number from +3 to -3 depending on how you feel in each case.

+3: I AGREE VERY MUCH
+2: I AGREE PRETTY MUCH
+1: I AGREE A LITTLE
-1: I DISAGREE A LITTLE
-2: I DISAGREE PRETTY MUCH
-3: I DISAGREE VERY MUCH

PLEASE ANSWER EVERY ITEM

(1)	-3	-2	-1	+1	+2	+3	(16)	-3	-2	-1	+1	+2	+3
(2)	-3	-2	-1	+1	+2	+3	(17)	-3	-2	-1	+1	+2	+3
(3)	-3	-2	-1	+1	+2	+3	(18)	-3	-2	-1	+1	+2	+3
(4)	-3	-2	-1	+1	+2	+3	(19)	-3	-2	-1	+1	+2	+3
(5)	-3	-2	-1	+1	+2	+3	(20)	-3	-2	-1	+1	+2	+3
(6)	-3	-2	-1	+1	+2	+3	(21)	-3	-2	-1	+1	+2	+3
(7)	-3	-2	-1	+1	+2	+3	(22)	-3	-2	-1	+1	+2	+3
(8)	-3	-2	-1	+1	+2	+3	(23)	-3	-2	-1	+1	+2	+3
(9)	-3	-2	-1	+1	+2	+3	(24)	-3	-2	-1	+1	+2	+3
(10)	-3	-2	-1	+1	+2	+3	(25)	-3	-2	-1	+1	+2	+3
(11)	-3	-2	-1	+1	+2	+3	(26)	-3	-2	-1	+1	+2	+3
(12)	-3	-2	-1	+1	+2	+3	(27)	-3	-2	-1	+1	+2	+3
(13)	-3	-2	-1	+1	+2	+3	(28)	-3	-2	-1	+1	+2	+3
(14)	-3	-2	-1	+1	+2	+3	(29)	-3	-2	-1	+1	+2	+3
(15)	-3	-2	-1	+1	+2	+3	(30)	-3	-2	-1	+1	+2	+3

APPENDIX VIIA
LETTER TO COUNSELORS

COUNTY OF LOS ANGELES

RANCHO LOS AMIGOS HOSPITAL

7601 EAST IMPERIAL HIGHWAY
DOWNEY, CALIFORNIA 90242
(213) 773-4331 or 869-0921

DEPARTMENT OF HOSPITALS

EUGENE R. ERICKSON
ADMINISTRATOR

HAROLD MAZUR, M.D.
MEDICAL DIRECTOR

February 22,1972

Dear Counselor,

We at the Vocational Services Department of Rancho Los Amigos Hospital are conducting a study to determine which characteristics of clients are significant in predicting their success in workshop programs.

We would appreciate your assistance in evaluating one of your clients, _____,on the enclosed form and returning it to us.

If you have any questions, please feel free to contact me at (213)869-0921(Ext.2671). Thank you.

Sincerely.

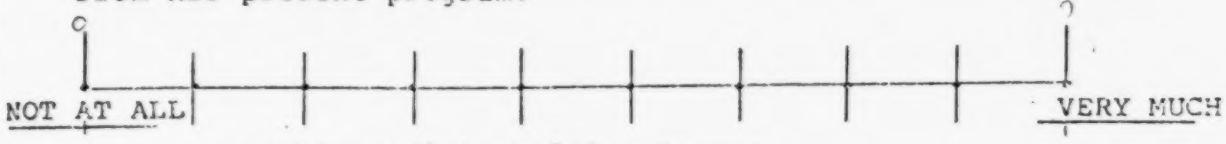
APPENDIX VIIB

COUNSELOR'S RATING FORM

Please rate your client, _____, on the following items:

1. Rate your client on his present degree of employability, i.e., how employable do you think he is now? (mark an "x" on the vertical line which best describes his employability at present):

2. Knowing all you do about your client, and basing your judgment on his characteristics, how much do you expect him to profit* from his present program?



____ cannot predict, waiting to see.

*profit - to gain vocational, social or psychological adjustment, becoming more employable or a better employee in the future.

3. What do you think is the highest level of expectation for this client?

5 _____ definitely will be able to maintain competitive employment.

4 _____ most likely will be able to maintain competitive employment.

3 _____ possibly will be able to maintain competitive employment.

2 _____ sheltered workshop only.

1 _____ questionable even for sheltered workshop.

0 _____ most likely unemployable at any level.

4. Why did you place your client in his current program?

Counselor's name _____

Date _____

APPENDIX VIII

SUPERVISOR'S EVALUATION FORM (WORKSHOP SAMPLE)

PROGRESS REPORT

Name: _____ Client Seen For: _____

Job: _____ Evaluation: _____

Training: _____

Supervisor's Name: _____ Date of This Report: _____

Referred By: _____ Date Client Began: _____

I. ATTENDANCE

_____ Total number of times client was ten or more minutes late to work.

_____ Total number of absences in which the client failed to notify the shop in advance or call in.

What is the usual explanation for absences or tardiness?

_____

_____

II. WORK EVALUATION

Use the rating scale given below to rate the client on each trait listed.

Please evaluate the trainee on all items; if you are unable to rate the trainee fairly on an item, please note and explain why.

Work Evaluation Rating Scale - Legend:

1. Very Employable:	Client performs at the highest expectations for competitive industrial employment.
2. Employable:	Client performs at average level for competitive industrial employment.
3. Potentially Employable	Client needs improvement to be acceptable for competitive industrial employment.
4. Employable Workshop:	Client does not have the potential for competitive industrial placement but is feasible for a sheltered workshop.
5. Not Employable	Client does not meet the minimum performance requirements for long-range employment in a vocational sheltered workshop.

	4 Very Employable	3 Employable	2 Potentially Employable	1 Employable workshop	0 Not Employable
WORK PERFORMANCE FACTORS:					
1. Follow instructions					
2. Learning ability					
3 Memory retention					
4. Knowledge of complete job in addition to own task					
5. Concentration, i.e. not easily distracted by noise, etc.					
6. Productivity - Quality					
7. Productivity - Quantity					
8. Adaptability - Flexibility (in adjusting to different work tasks)					
9. General Intellegence					
PHYSICAL ABILITIES					
1. Dexterity - Gross					
2. Dexterity - Fine					
3. Sitting - Prolonged					
4. Walking - Prolonged					
5. Standing - Prolonged					
6. Strenuous activity					
7. Lifting - Bending					
8. Visual acuity					
9. Eye-hand coordination					
10. Stamina (fatigue tolerance)					
WORK HABITS AND ATTITUDES:					
1. Cooperation					
2. Adjustment to fellow workers					
3. Acceptance of supervision					
4. Adjustment to supervision					
5. Emotional stability					
6. Motivation and enthusiasm to do job well					
7. Initiative					

APPENDIX IVA
LETTER TO INSTRUCTORS

COUNTY OF LOS ANGELES

RANCHO LOS AMIGOS HOSPITAL

7601 EAST IMPERIAL HIGHWAY
DOWNEY, CALIFORNIA 90242
(213) 773-4331 or 869-0921

DEPARTMENT OF HOSPITALS

EUGENE R. ERICKSON
ADMINISTRATOR

HAROLD MAZUR, M.D.
MEDICAL DIRECTOR

December 1, 1971

Dear

We at the Vocational Services Department of Rancho Los Amigos Hospital are asking for your assistance in a study to determine which characteristics of disabled students are significant in predicting graduation from college and ultimately, employment and success after graduation.

We would appreciate your evaluation of one of your students, _____. Enclosed is an evaluation form which we would like you to fill out at the end of the quarter and return to us. Release of such information has been approved by the student. A copy of this form is available upon request.

If you have any questions, please feel free to call me at (213) 869-0921, Ext. 2671. Thank you for your cooperation.

Sincerely,

Sharon Moriwaki, Ph.D.
Vocational Services

APPENDIX I-B

INSTRUCTOR'S EVALUATION FORM (COLLEGE SAMPLE)

Please evaluate the student at the end of the semester(quarter).

Student's name _____

Date of evaluation _____

Professor's name _____

Course _____

I. Attendance:

_____ Total number of absences

Has student contacted you to notify of his(her) absences? Yes____ No ____

II. Performance:

Use the rating scale given below to rate the student on each of the items listed. Please evaluate the student on all items; if you are unable to rate the student fairly on an item, please note and explain why.

1. OUTSTANDING -- student performs at the highest expectations for competitive college work.

2. ABOVE AVERAGE -- student performs above the level of the average student.

3. AVERAGE -- student performs at average level for competitive college work.

4. BELOW AVERAGE -- student needs improvement to be acceptable for competitive college work.

5. NOT COLLEGE MATERIAL -- student performs far below the minimum required for competitive college work; he should not be in college.

Appendix IXB (cont'd)

ERFORMANCE FACTORS:	Outstandin	Above average	Average	Below average	Not colleg material
1. Follow instructions					
2. Learning ability					
3. Memory retention					
4. Comprehension of concepts in subject area					
5. Concentration ability					
6. Completion of assignments on time					
7. Quality of work					
8. Problem solving ability					
ORK HABITS AND ATTITUDES:					
1. Adjustment to fellow students					
2. Adjustment to professor					
3. Acceptance of professor's feedback					
4. Emotional stability					
5. Enthusiasm					
6. Initiative					
7. Contribution to class					

III. ASSIGNMENT GRADES:

Date	Type of assignment	Grade

Appendix IXB (cont'd)

EXAMINATION GRADES

Date	Type of examination	Grade
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

FINAL COURSE GRADE ..... _____

STUDENT'S POTENTIAL IN THIS AREA:

_____ Outstanding

_____ Above average

_____ Average

_____ Below average

_____ None

II. GENERAL EVALUATION OF THE STUDENT:

In your estimation, do you think the student is:

_____ an outstanding student who will do well in his major, and perhaps go on in his chosen field.

_____ an average student who will graduate and find employment.

_____ most likely to graduate, but post-graduation adjustment cannot be predicted.

_____ having difficulties in his coursework, and will take longer to graduate than the average student.

_____ is far below average and will most likely drop out before graduation.

The Influence of Psychosocial Factors on the Success of Disabled Persons in Different Vocational Education Settings

APPENDIX X

FOLLOW-UP INTERVIEW SCHEDULE (RLAH)

Name:_____ Sex _____

Age_____ Birthdate_____ _____

Disability_____

Circumstance of Disability_____

Education_____

Date of Closure_____No. Services_____

Services:_____

_____

_____

_____

_____

_____

Placed When Left Rancho:

Name of Company_____

How Placed_____

Position_____

Salary, raises_____

Still employed there_____

If not, why left_____

How long on the job_____

Satisfaction with job_____

Present Job

Name of Company_____

How Placed_____

Position_____

Salary, raises_____

How long on the job_____

Satisfaction with job_____

Appendix X (cont'd)

evious work history_____

_____

ancho

Did they return to Rancho for further services_____

When at Rancho how far did they travel for services_____

How did they get here_____

How many days per week_____

inancial Income

_____

iving Arrangements

Marital Status_____

Children_____Ages_____

Own house or rent_____

How many moves in last year_____

amily Mobility

_____

ctivities

When not working, leisure_____

If not working _____

Any general problems_____

Anyone you can talk to about problems_____

_____

ssistive Devices

Any on job_____

If not, would they be helpful_____

APPENDIX XI
Follow-up Information (DVR)

Employment Information:

1. Name of current job _____
2. How long on job _____
3. Satisfied with current job _____
4. How got job _____
5. Promotions since starting _____
6. Salary now _____
7. Other jobs since 1st placement _____

_____

_____

_____

8. Number of weeks unemployed since first placement _____

_____

9. If unemployed, what happened to job placed at _____

_____

_____

Health Information:

1. Do you have any serious medical problems now? _____

_____

2. Do health problems keep you home from work? _____
3. Are you satisfied with your health? _____

_____

_____

BK:bt
7/21/72

Appendix XI (cont'd)

Living Arrangements:

1. Own, rent or live with friends. _____

_____

2. Satisfied with housing? _____

_____

3. If not, why? _____

_____

4. Moved much since becoming employed? _____

_____

_____

Social Activities:

1. Married now? _____

2. Married since becoming employed? _____

3. Children _____

Activities:

1. Activities when not working _____

_____

_____

2. Biggest problems now _____

_____

_____

3. Plans for future _____

_____

Activities of Daily Living:

1. Use prosthetic devices for work? _____

Appendix XI (cont'd)

2. Could you use any for work or leisure? _____

_____

_____

3. Did you ever have any? _____

_____

_____

Additional Services: _____

_____

_____

_____

BK:bt

7/21/72

APPENDIX XII
VALIDATION OF THE ETS RATING FORM

Thirty-five clients from the Work Preparation Center were followed for 10 months and their success was related to ratings on the ETS form. "Success" was defined as the attainment of employment, on-the-job training with suitable progress or education that would lead to a job. Thirteen clients were successful; 22 were not.

The ETS form was quantified by assigning numbers to the various rating categories. "Very employable" was given a score of 4; "employable", 3; "potentially employable", 2; "employable workshop", 1 and "not employable", 0. Average scores for each section were calculated. Both highest level and degree of improvement on the ETS form were related to success using the point biserial correlation (rpb). The ETS form was divided into Work Performance, Physical Abilities and Work Habit sections. The results are presented below:

	Successful (N=13)		Unsuccessful (N=22)				
Variable	Mean	s.d.	Mean	s.d.	t	p	rpb
Work Performance:							
highest level	2.9	.65	1.9	.50	5.2	<.001	.67
gain	.3	.43	- .4	.46	4.2	<.001	.45
Physical Abilities:							
highest level	2.6	.78	1.8	.88	2.6	<.01	.43
gain	.2	.80	- .2	.57	n.s.		
Work Habits:							
highest level	3.1	.51	2.3	.78	3.3	<.01	.50
gain	.3	.62	- .2	.62			

Correlations were calculated between each of the three sections on the ETS form and partial correlations were derived to estimate which factor or factors were most important. These results are below:

Variables Correlated	Correlation
Work Performance and Physical Abilities	.62
Work Performance and Work Habits	.79
Work Habits and Physical Abilities	.48
Partial Correlations	
Work Performance and Physical Abilities with Habits constant	.81
Work Performance and Habits with Physical Abilities constant	.78
Work Habits and Physical Abilities with Work Performance constant	.00

Clearly, the items on the Work Performance Section were more basic than items on the other sections; i.e., Work Performance abilities underlie abilities in the other sections.

Finally, expectancy tables based only on this sample were computed. These are only rough approximations due to the small sample size.

Probability of success after WPC	
Average ETS total score	p
<10.0	99%
8-9.9	64%
6-7.9	38%
4-5.9	9%
2-3.9	1%
Average Work Performance Section Score	p
<3.0	99%
2.5-2.99	63%
2.0-2.49	22%
1.5-1.99	10%
1.0-1.49	1%

Conclusions

1. The ETS form appears to have a high degree of validity for predicting successful closure status after the WPC experience.
2. Of the factors on the ETS form, those items measured on the Work Performance scale appeared to be more basic to the others.
3. The ETS form can be used to guage probabilities of expected success but a larger sample should be studied.
4. Continual training on the use of the ETS form would likely contribute to its sustained validity.

APPENDIX XIII

COMPARISON OF WPC AND CRI SAMPLES ON INITIAL AND FINAL EVALUATIONS

	Two Weeks				Final Evaluation		
	CRI	WPC	t		CRI	WPC	t
Performance							
$\bar{X}$ =	2.51	2.02	df=37	$\bar{X}$ =	2.94	2.14	
S =	.73	.57	4.18	S =	.84	.74	3.06
n =	19	20	p<.05	n =	19	20	p<.01
Physical Abilities			df=37				
$\bar{X}$ =	2.78	1.84	3.47	$\bar{X}$ =	3.20	2.02	3.83
S =	.73	.91		S =	.96	.92	
n =	19	20	p<.01	n =	19	20	p<.01
Habits & Attitudes			df=37				
$\bar{X}$ =	2.78	2.16	2.52	$\bar{X}$ =	3.22	2.31	1.74
S	.73	.77		S =	.98	.78	
n =	19	20	p .05	n =	19	20	NS

APPENDIX XIV

INTERCORRELATION OF CHARACTERISTICS

WPC	Mach	I-E	Dom.	IS	Goals	ATDP-S	ATDP-O
Mach	--	.21	-.21	-.06	.20	-.47*	-.40
I-E		--	-.52**	-.56**	-.22	-.51**	-.44*
Dominance			--	.26	.03	.44*	.45*
IS					.35	.46*	.49*
Number of goals					--	.03	-.01
ATDP-S						--	.71***
ATDP-O							--

WPC n=24
* p<.05
** p<.01
*** p<.001

CRI

Mach	--	.26	-.28	-.42	.21	-.06	-.04
I-E		--	-.31	-.37	-.05	-.12	-.27
Dominance			--	.36	.03	.00	-.13
IS				--	-.20	.25	.08
Number of goals					--	-.02	.33
ATDP-S						--	.35
ATDP-O							--

CRI
n=20 N.S.

Combined Workshop

Mach	--	.23	-.24	-.16	.17	-.31*	-.27
I-E		--	-.43**	-.54***	-.12	-.34*	-.38*
Dominance			--	.24	.05	.31*	.28
IS				--	.02	.28	.37*
Number of goals					--	.08	.05
Indep						-.20	-.27
ATDP-S						--	.57***
ATDP-O							--

Combined Sample n=46
*p<.05
**p<.01
***p<.001

APPENDIX XIV (cont'd)

	Mach	I-E	Dom.	IS	Goals	ATDP-S	ATDP-O
College							
Mach	--	-.14	.08	.04	-.44*	-.33	-.16
I-#		--	-.15	.28	.10	.28	.16
Dominance			--	.07	.10	.16	.03
IS				--	-.04	.31	.46*
Number of goals					--	.30	.44*
Indep						.00	.08
ATDP-S						--	.35
ATDP-O							--

College $p<.05$
n=25